REPORT

ON THE

LAND REVENUE SETTLEMENT

OF THE

DRUG TAHSIL

IN THE

RAIPUR DISTRICT

OF THE



EFFECTED DURING THE YEARS 1896 to 1902.

सत्यमेव जयते



Ragpur:

PRINTED AT THE SECRETARIAT PRESS.

1903.

- 1. Page 2, line 16.-For "Dhamtari parganas" read "Dhamda pargana."
- 2. Page 4, line 41.—The figures for kodon-teora and, read The figures for kodon, teora and double-cropping.
- 3. Page 13, line 57.—For "at a cost of 100 per acre" read "at a cost of Rs. 100 per acre"
- 4. Page 16, line 41 .- For " 875 acres " read " 8.75 acres."
- 5. Page 30, lines 24 and 25.—For "Utai and Ranitalao. These " read " Utai and Ranitalao,—these are important cattle-markets."
- 6. Page 33, line 6.—For "the outturn of Raipur in 1899 " read "the outturn of Raipur in 1899-1900."
- 7. Page 41, line 9.—For "a fair rate from the poor soil village " read "a fair rate for the poor soil village ."
- 8. Page 46, line 14.—For "two chauthiyas in three days" read "two kathas in three days."
- 9. Page 64, Statement Column 3, "that fall with the limits," read "that fall within the limits."
- 10. In the sketch map of the Drug Tahsil—For "area in square miles of Drug Tahsil (Khalsa) 2,542, read "for area in square miles of Drug Tahsil (Khalsa) 1,165."

RAIPUR:

Dated the 7th September 1903.



Part.	Section.	Description.			Paragraphs
		Scope of this Report	•••		
,		-			1 2
1	I	Description of the Drug Tabsil Rivers	•••		3
		Description of groups	• • •		4
	ļ	Communications	•••		5
	II	History-			
	1 111	Previous assessments	•••	•••	8 7
	111	Agriculture Decline in the rice area due to famine	•••	•••	8
	ļ	Other fluctuations due to the famines-			v
		Wheat	•••		9
		Kodo		•••]	10
		Double-cropping	•••	•••	11
		Net cropped area and fallow	•••	•••	12 13
	1	Summary of fluctuations Rainfall	•••		1.5
	ł	Irrigation	•••		1520
		Recent improvements			21
		Encouragement of improvements	•••	•••	22
		Improvements contemplated		•••	23
		Experiment in irrigating rice from tem	porary wells	•••	24 25
	1	Manure	•••	••••	26
		Transplantation of rice Pests and diseases of crops.	•••		27
		Sugarcane	•••		28
		Linseed	•••	•••	29
		Miscellaneous experiments	• • •		30
		Lakhabata	•••	•••	31
		Cattle	· • •	•••	8234 85
		Soils Positions recognized by the people-	•••	•••]	00
		Rice-land			36
		Non-rice land	•••	•••	87
		Classification employed	•••	•••	38-40
		Classes recommended	•••	•••	41 4243
		Crop experiments	•••	•••	41
	i	Outturn of crops Distribution of soils by groups	•••	•••	45
	IV	Trade and Prices-	<i></i>		
		Prices	•••		4651
	1	Bazars and trade contres	•••		52
		Export	•••	•••	53
	v	The people-			54
		Population Distribution by occupation	•••	•••	55 55
		Malguzare	•••		56-60
	[Concealment of assets			61
		Tenants	•••	•••	62 69
		Transfer of tenant-right	•••	•••	63 64
		Sub-letting High rents at different stages	•••	•••	65
		Indebtedness	•••	•••	66
		Chamars	•••		67-68
		Rate of interest	•••		69
		Labourers	•••	•••	70 71
		Casual labour	•••		71 72
		Emigration	•••	•••	72 73
		Village servants General condition of the people	•••	•••	74
П	I	Account of re-settlement-			
	-	Correction of maps			75-88

Index to the Report on the Revision of the Land Revenue Settlement of the Drug Tahsil of the Raipur District.

II Attestation Staff 87 Procedure in field work III Assessment System 90 System 91 Procedure 92 Procedure in field work 91 Procedure in field work III Assessment System 92 Procedure in field work 91 Procedure in field work Rest 92 Procedure in field work 91 Procedure in field work 92 Procedure in field work Rest 92 Procedure in field work 92 Procedure in field work 92 Procedure in field work Rest 93-94 Rest 93-94 Procedure in field work 93-94 Procedure in field work Rest 95 Rest 95 Rest 95 Procedure in field work 96 Procedure in field work Assessment 97-98 Rest Assessment Deduced rent and lakhabata 102 Thekadars Deduced rent and lakhabata 103 Deduced rent and lakhabata IV Matters incidental to assessment Land Record Staff <th>Part.</th> <th>Section.</th> <th></th> <th>Description,</th> <th></th> <th></th> <th colspan="2">Paragraphs.</th>	Part.	Section.		Description,			Paragraphs.	
III Procedure in field work 8889 Siwai 90 Assessment System 91 Procedure 92 Chitta and khationi 92 Chitta and khationi 92 Chitta and khationi 9394 Rent-rate Reports 95 Rent-rate Reports <td< th=""><th></th><th>II</th><th></th><th></th><th>• <u></u></th><th></th><th>······</th></td<>		II			• <u></u>		······	
III Siwai 90 Assessment— System 91 Procedure 92 Chitta and khationi 92 Chitta and khationi 92 Chitta and khationi 92 Chitta and khationi 92 Chitta and khationi 93-94 Rent proposals 95 Rent proposals Assessment Proceduced rent and lakhabata Deduced rent and lakhabata IV Matters incidental to assessment— Ivad Record Staff </td <td></td> <td></td> <td></td> <td>•••</td> <td>•••</td> <td></td> <td></td>				•••	•••			
III Assessment— 91 System 92 Chitta and khatjoni 93-94 Ryotwari abstracts 95 Rent-rate Reports Assessment Rent proposals Accessment Bandard Stracts Assessment Rent proposals Accessment Bandard Stracts Bandard Stracts System folos IV Asters incidental to assessment— Land Record Staff IV Matters incidental to assessment— Land Record Staff Instalment of revenue Instalment of revenue Partition V General <td></td> <td></td> <td>Procedure in field</td> <td>work</td> <td></td> <td></td> <td>8889</td>			Procedure in field	work			88 8 9	
V System 91 Procedure 92 Chitta and khationi 9394 Ryotwari abstracts 95 Rent-rate Reports 96 Rent proposals 9798 Assessment 99100 Exemptions Assessment Deduced rent and lakhabata Deduced rent and lakhabata Re-distribution of Sanjari IV Matters incidental to assessment Land Record Staff Land Record Staff Natters incidental to assessment Land Record Staff		1	Siwai				90	
Image: Procedure procedur		III	Assessment-					
Image: Procedure procedur			System		•••		91	
Image: Note of the second state in							92	
Image: Note of the second state in			Chitta and khatio	ni			93-94	
Rent-rate Reports 96 Rent proposals 9798 Assessment Land Record Staff IV Matters incidental to assessment Iv Iv Iv Iv V								
Image: Non-one of set lement 9798 Assessment 99-100 Exemptions 101 Announcement 102 Thekadars 103 Deduced rent and lakhabata 104 Abatement 105 Re-distribution of Sanjari 106 General 107 Matters incidental to assessment— 107 Ivatters incidental to assessment— 107 Matters incidental to assessment— 107 Ivatters incidental to assessment— 108 System followed 108 System followed Instalment of revenue V General						1		
Assessment 99-100 Exemptions 101 Announcement 102 Thekadars 103 Deduced rent and lakhabata 103 Deduced rent and lakhabata 103 Deduced rent and lakhabata 104 Abatement 105 Re-distribution of Sanjari 105 Re-distribution of Sanjari 106 General 107 Matters incidental to assessment— 107 Land Record Staff 108 System followed 110 Kotwars 111 Instalment of revenue 113 Muafi V General Cost of settlement Its							9798	
Exemptions 101 Announcement 102 Thekadars 103 Deduced rent and lakhabata 104 Abatement 105 Re-distribution of Sanjari 105 Re-distribution of Sanjari 106 General 107 Matters incidental to assessment— 107 Land Record Staff 108 System followed 110 Kotwars 111 Instalment of revenue 112 Partition Wazib-ul-arz V General V General Term of settlement		i						
Announcement 102 Thekadars 103 Deduced rent and lakhabata 104 Abatement 105 Re-distribution of Sanjari 105 Re-distribution of Sanjari 105 Re-distribution of Sanjari 106 General 107 Matters incidental to assessment— 107 Land Record Staff 109 Instruction and recruitment 110 Kotwars 111 Instalment of revenue 113 Muafi 114 Wazib-ul-arz V General V General V General Its </td <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td>		1						
Thekadars 103 Deduced rent and lakhabata 104 Abatement 105 Re-distribution of Sanjari 105 Re-distribution of Sanjari 106 General 107 IV Matters incidental to assessment— 107 Land Record Staff 108 System followed 109 Instruction and recruitment 110 Kotwars 111 Instalment of revenue 113 Musfi 114 Wazib-ul-arz V General V General It6 Cost of settlement It8 <td></td> <td></td> <td></td> <td>-</td> <td>•••</td> <td></td> <td></td>				-	•••			
IV Deduced rent and lakhabata 104 Abatement 105 Re-distribution of Sanjari 106 General 107 IV Matters incidental to assessment— 107 Land Record Staff 108 System followed 109 Instruction and recruitment 111 Instalment of revenue 112 Partition 113 Musfi V General Term of settlement		1			•••			
Abatement 105 Re-distribution of Sanjari 106 General 107 IV Matters incidental to assessment— 107 Land Record Staff 108 System followed 109 Instruction and recruitment 110 Kotwars 111 Instalment of revenue 112 Partition 113 Musfi 115 V General Term of settlement						1		
IV Re-distribution of Sanjari 106 IV Matters incidental to assessment— 107 Land Record Staff 108 System followed 109 Instruction and recruitment 110 Kotwars 111 Instalment of revenue 112 Partition 113 Musfi 115 V General 116 Cost of settlement 117 Term of settlement					•••			
IV General 107 IV Matters incidental to assessment— 108 Land Record Staff 109 Instruction and recruitment 110 Kotwars 111 Instalment of revenue 112 Partition Muafi Wazib-ul-arz V General Cost of settlement IN IN IN Instalment of settlement Muafi IN IN IN IN IN IN IN IN IN <				F Senjari	•••			
IV Matters incidental to assessment— 108 Land Record Staff 109 System followed 109 Instruction and recruitment 110 Kotwars Instalment of revenue 111 Instalment of revenue 112 Partition 113 Muafi 114 Wazib-ul-arz 116 Cost of settlement 117 Term of settlement						- 1		
Land Record Staff 108 System followed 109 Instruction and recruitment 110 Kotwars Instalment of revenue Partition Muafi Wazib-ul-arz General Cost of settlement Inf Inf Inf Instalment of revenue Inf Instalment of revenue Il12 Partition Il13 Muafi Il16 Cost of settlement Il18		TV		••••	•••	•••	101	
System followed 109 Instruction and recruitment 110 Kotwars 111 Instalment of revenue 111 Instalment of revenue 112 Partition 113 Musfi 114 Wazib-ul-arz 115 Cost of settlement 117 Term of settlement 118		í - ·					108	
Instruction and recruitment 110 Kotwars 111 Instalment of revenue 112 Partition 113 Muafi 114 Wazib-ul-arz 115 V General 116 Cost of settlement 117 Term of settlement 118		[
Kotwars 111 Instalment of revenue 112 Partition 113 Musfi 114 Wazib-ul-arz 115 V General 116 Cost of settlement 117 Term of settlement 118		1	Instruction and m					
Instalment of revenue 112 Partition 113 Muafi 114 Wazib-ul-arz 115 V General 116 Cost of settlement 117 Term of settlement 118		Ì		Berundment	•••	•••		
Partition 113 Muafi 114 Wazib-ul-arz 115 V General 116 Cost of settlement 117 Term of settlement 118				S	•••		•	
Musfi 114 Wazib-ul-arz 115 V General 116 Cost of settlement 117 Term of settlement				TACHER BRACK	•••	•••[
Wazib-ul-arz 115 V General 116 Cost of settlement 117 Term of settlement 118		1		10023332079	***			
V General 116 Cost of settlement 117 Term of settlement 118				0.00	•••			
Cost of settlement 117 Term of settlement 118		v			•••		•••	
Term of settlement 118		•		11-1 4.6.4	•••	•••		
				ALL ALL	•••			
			Notice of officers	A CONTRACTOR		•••	118 119	

सत्यमेव जयते

ii

No. 1863-422-2, dated Simla, the gist October 1906.

From-J. WILSON, Esq., c. s. 1., Secretary to the Covernment of Indis, Department of Revenue and Agriculture (Land Revenue),

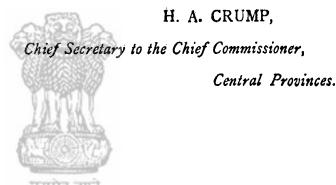
To-The Hon'ble the Chief Commissioner, Central Provinces.

In reply to Mr. Crump's letter No. 246-XI-4-46, dated the 21st September 1906, I am directed to say that the Government of India are pleased to confirm the orders passed by you on the final Report on the Land Revenue Settlement of the khalsa portion of the Drug Tahsil now in the Drug District, Central Provinces.

No. 360-XI-4-46.

Nagpur, the 13th November 1906.

Copy, together with a copy of this office letter No. 246-XI-4-46, dated the 21st September 1906, and of the Chief Commissioner's Resolution No. 208-XI-4-46, dated the 10th idem, forwarded to the Commissioner of Settlements, Central Provinces, for information and favour of necessary action, with reference to his letter No. 2434-74, dated the 4th June 1906.



Sectt. Press, Nagpur :-- No. 2468, Civil Seett.-12 4-07-300.

No. 2484-74, dated Nagpur, the 4th June 1906.

From- C. W. E. MONTGOMERIE, Esq., I. C. S., Commissioner of Settlements, Central Provinces.

To-The Second Secretary to the Hon'ble the Chief Commissioner, Revenue Department, Central Provinces.

I have the honour to submit the Final Report on the Land Revenue Settlement of the directly administered (Khalsa) portion of the Drug Tabsil in the Raipur District. With effect from 1st January 1906 when the new Drug District was constituted, the area now dealt with merged into the new district, and 20 per cent of its area was transferred to the Sanjari Tahsil.

2. It was intended in 1897 when Mr. Blenkinsop was posted as Settlement Officer to the Raipur District, to revise the revenue of the whole of the Khalsa portion in all the four tabsils of that district. Much of the map amendment and attestation was completed, but the district suffered severely in the famines of 1896-97 and 1899-1900 and it was then decided to confine revision to the summarily settled parts of the district, that is, those parts which had not come under the regular settlement of 1885-89 when rents had been enhanced by 13 per cent. Ultimately even this programme could not be fully carried out, and assessment was completed and announced only in the Drug Tahsil. Redistribution of revenue was also effected in the Sanjari tract of the Dhamtari Tahsil, but no rental or revenue enhancements were made.

3. Before the constitution of the Drug District the Drug Tahsil was the western tahsil of the Raipur District, covering an area of 1,911 square miles. The Khalsa portion, with which the report deals, comprises 1,165 square miles. The land is fairly typical of the Raipur plains, long stretches of level country with gentle undulations, and bare of hill or forest. The north-western portion of the tahsil contains tracts of fine wheat land, but the rest consists mainly of rice land, and throughout the tahsil, as elsewhere in Chbattisgarh, rice is by far the most important crop. Besides wheat and rice other valuable export crops are til and linseed. In years of late rainfall linseed is largely sown as an after-crop in the rice fields. The sowing is made while the rice is still standing, and the crop, though giving comparatively poor outturns, is produced at trifling cost. The population increased steadily up to the census of 1891, when it stood at 280,400 but fell to 240,632 in the disastrous decade which followed. The net cropped area works out at 1.9 acre per head of population. The principal castes are Chamars, Telis and Kurmis. Kurmis are good, and Telis fair cultivators, but the Chhattisgarh Chamar is notorious for slovenliness, obstinacy and mischief. Among proprietors Kurmis and Brahmans are the chief castes.

4. The last regular settlement was that offected by Mr. J. F. Hewitt between 1864 and 1869, when, though large enhancements were imposed on rents and revenue, the revenue was left at only Rs. 1,32,118 or 4 annas 8 pies per acre occupied for cultivation. Those were days when Chhattisgarh, almost land-locked, had little means of communication with the outside world, and when grain in good seasons was left to rot in the fields for want of means of export. Between 1885 and 1889 a summary re-settlement was effected, and the revenue raised to Rs. 1,72,392. No enhancement of rents was made, except in the case of absoluteoccupancy tenants, whose very low payments were raised by 11 per cent. The rents of occupancy and ordinary tenants were left untouched, and rose but little during the years which preceded the present settlement. The all-round rent-rate rose between the regular and summary settlements from Re. 0-8-4 to Re. 0-9-5 or by 13 per cent. Since the summary settle-ment the tabil has been opened up by the Bengal-Nagpur Railway and now has a ready means of export for its surplus produce both to Calcutta and Bombay, while the branch line between Katni and Bilaspur affords easy communication with Jubbulpore and northern India. The main line traverses the middle of the tahsil from cast to west, and the tahsil town of Drug is itself a station on the line. Good roads run north and south, and there is ready communiention in all directions owing to the easy nature of the country. The advent of the railway and the consequent facilities for export naturally caused an enormous rise in the prices of agricultural produce. For a comparison of prices in connection with rents it is necessary to go back to the regular settlement, since the intermeliate summary settlement was, except in the case of absolute occupancy holding, accompanied by no rental enhancement. At the present revision prices were found to have more than doubled in the thirty years. Between Mr. Hewitt's settlement and the present revision the area occupied for cultivation rose from 451,000 to 596,000 acres, or by 32 per cent., while the increase since the summary settlement was 8 per cent in spite of two severe famines. It is difficult to say how much of this latter increase is real, since it is possible that some land, though really abandoned by tenants in the famines, continued to be shown in the village papers as occupied, owing to the fact that it had never been formally surrendered. The severe effects of famine were most clearly shown in the crop statistics. The net-cropped area, though 10 per cent larger at revision than at the time of the regular settlement, had fallen from 530,000 to 465,000 acres since the summary sottlement, while the acreages under the important crops of rice and wheat, which at the summary settlement comprised 48 and 14 per cent of the net-cropped area, had shrunk to 40 and 84 per cent respectively. In these circumstances it was doubtful whether settlement operations should not be postponed, as in the case of the other tabsils, but it was found that Drug had suffered less than other tracts, and as the rent-rate was extremely low, having remained almost stationary for over thirty years, while prices had more than doubled, it was decided to complete and announce the assessment.

5. Of the occupied area 29 per cent is held by malguzars, 69 per cent by rent-paying tenante, and the balance of 2 per cent by plot-proprietors and privileged tenants, both of which are unimportant classes in this tahsil. Of the tenant area 18 per cent is held in absoluteoccupancy, 48 per cent in occupancy, and 39 per cent in ordinary right. The rental enhancement of the summary settlement, therefore, affected less than a fifth of the whole tenant area, for at that time only the rents of the absolute-occupancy class were enhanced. In spite of the enhancement tenants of this class, when revision was started, still held at rates 15 per cent below the all-round rate, and 25 per cent below the rate of ordinary tenants. Even the rate paid by ordinary tenants, Re. 0-10-9 per acre, is very low for good rice country with large areas of good wheat land. Rice land comprises 268,000 acres or nearly 46 per cent of the area in cultivation. Of this rice land 174,000 acres, or nearly 65 per cent, is capable in normal seasons of being twice cropped. In addition to this the tahsil contains more than 220,000 acres of what land much of which is free black sill and so the tahsil contains more than 220,000 acres of wheat land much of which is fine black soil, and nearly all of which is free from any natural defects of position. There can be no doubt that the low rent rate is a survival of the times, not very far back, when the district had few means of disposing of its surplus produce. It may be long before it is possible to assess it at fair rates, more especially since the Chamars have a deep-rooted belief that rents can be enhanced only at settlement, and resist all attempts at enhancement on the part of proprietors. There are few malguzars who are strong enough to overcome the compact resistance of a Chamar tenantry, and it thus happens that in Chhattisgarh little guide to the real value of land can be obtained from a scrutiny of rents taken by proprietors from new tenants, or those taken from old tenants by consent or through the Courts. Tenants were of course hard hit by the famines, and after the second famine more than half of them were found to be indebted, but debt was very light. It did not increase much in the second famine, owing to lack of credit and the unwillingness of lenders to make further advances until they had recouped the money which they had previously advanced.

				Rent-rate per acre.								Enhance-	Total rise over	
Class of Tenant.			At 30 years' Seitlement.		At revision.		After revision.			Rise in rate since regular Settlement,	ment imposed at .revision.	rates of 30 years' Settlemont.		
			Rs.	a.	p.	Rs.	8.	p.	Be.		. p.	Per cent.	Per cent.	Per cent.
Absolute-occu	pancy	••-	0	6	9	0	8	4	0	9	8	24	16	48
Occupancy	•••	•••	0	8	8	0	9	б	0	10	5	14	11	26
Ordinary	•••	•••	0	9	3	0	10	3	0	10	11	12	7	19
	All clases	•••	0	8	4	0	9	6	0	10	6	14	10	26

6. The following table shows, by a comparison of the acreage rates, the result of the rental revision :-

The rise in the rent-rate of absolute-occupancy tenants since the regular settlement represents the enhancement imposed at the summary settlement. At the present settlement though this rate has been further enhanced by 16 per cent the payments of absolute-occupancy tenants still fall at a rate considerably lower than that paid by the other classes of tenants. The Settlement Officer points out that the occupancy land at the summary settlement coincided to a large extent with the ordinary land at the thirty years' settlement, so that the occupancy rate showed almost complete stagnation at revision. The only rise in the rates paid for this land after more than thirty years is therefore the enhancement now imposed, which is trifling when compared with the enormous rise in prices. The enhancement imposed on ordinary tenants is only 8 pics per acre, and in many cases rents of ordinary tenants were left untouched. The rent-rates are all extremely low, and the all-round rate after enhancement is ouly 26 per cent higher than it was at the regular settlement, since which time prices have more than doubled. The total enhancement of rents amounts to Rs. 23,085, of which a sum of Rs. 4,604 represents the rental fixed on land previously held without payment. Payments of the small and unimportant class of malik-makbuzas have been raised from Rs. 1,461 to Rs. 1,732, or by 19 per cent, but land held by this class still pays a rate far below even that paid by absolute-occupancy tenants.

7. I now turn to the assessment of the proprietors' home-farms. Many of the malguzars are very wealthy, and while some suffered in the famines even more severely than their tenants, there were others who turned the occasion to advantage and emerged in a stronger position than before. Nothing in the statistics is more remarkable than the large increase in the home-farms held by proprietors. The area of the home-farm, which at the summary settlement was 125,000 acres, was found at revision to have risen to 173,000 acres, many landlords, especially the Banya Malguzars of the Dhamda wheat tract, having taken advantage of the famines to oust their tenants. The valuation at which this land has been assessed results in an average rate of Re. 0-11-3 per acre, which is somewhat higher than the average rent-rate of Re. 0-10-6. Considering that the malguzar almost invariably cultivates much of the best land in the village, and especially much of that lying immediately below the village tanks, this assessment is very moderate. Except in the Dhamda group, where on account of harsh treatment of tenants, a rather higher valuation was taken, the average soil-unit incidence is little higher than that adopted in the case of occupancy land, and well below that adopted for the valuation of land held in ordinary right (vide paragraph 99 of the Report). Only 7,892 acres of the home-farm were leased out, and the rents said to be paid for this averaged Re. 1-0-3 per acre. Siwai, or miscellaneous income from waste land, fisheries, tanks, etc., is of trifling importance and was valued at Rs. 2,612.

8. The total assets, as revised, amount to Rs. 4,01,236 on which a revenue of Rs. 2,05,118 has been assessed. This assessment absorbs 51 per cent of the assets, or one per cent less than the fraction taken at last settlement. The full revised revenue gives an increase of Rs. 32,805 or 19 per cent over the existing revenue. The net realizable revenue has risen by Rs. 32,288 or by 20 per cent. Of this increase Rs. 23,957 is made good to proprietors by the net enhancement of malik-makbuzas' and tenants' payments. The extent to which the incomes of the malguzars have been immediately reduced, is thus only 5 per cent. In the case of deserving landlords the Settlement. The revenue rate per acre has been raised from Re. 0-5-2 in 1887 to Re. 0-5-7 or by only 8 per cent. These are still extraordinarily low rates for a tract in which most of the cultivated area consists of good wheat and rice land.

9. This report would in the ordinary course have been submitted soon after the new settlement was announced in 1902. But in the autumn of that year there was another almost complete failure of the rice crop, and fears of another famine were entertained. Famine relief was in fact given on a considerable scale, but the rabi harvest exceeded expectations, and this, together with an ample demand for labour in Bengal, Berar and Nagpur, prevented any degree of distress approaching that which had existed in the previous famines of 1896-97 and 1899-1900. Additional measures of relief were taken in the shape of very large suspensions Revenue to the amount of Rs. 1,58,800 or more than three-fourths of the full of revenue. of revenue. Revenue to the amount of Rs. 1,38,300 or more than three-fourths of the full annual demand, was suspended, and nearly the whole of this was subsequently remitted. Liberal advances for the purchase of seed grain were also made. The recovery made by the tabsil after this third period of distress is nowhere better shown than in the statistics regard-ing the recovery of the loans advanced in 1902-08 and in those of revenue collections for the following year 1903-04. The loans advanced in 1902-03 for the purchase of seed grain amounted to Rs. 2,16,700, and were recoverable in one instalment after the kharif harvest immediately following and one of the forst rine heavents on second followed and analysis immediately following. One of the finest rice harvests on record followed, and enabled the money advanced to be collected without difficulty and almost in full, collections on account of principal amounting to Rs. 2,15,800, or more than 99 per cent. Not only were the people able to repay these advances, but the revenue figures for the year 1903-04 show that nearly cent per cent of the full demand was collected, excellent harvests of both kharif and rabi crops having enabled the revenue to be paid without difficulty. The following year 1904-05 saw another good rice harvest, but a confident prophecy of the astrologers that the season would bring another famine obtained wide credence, and large areas of rice land were put under kodon, in the hope of snatching some crop out of the coming disaster. The steady rain edmixed to find the back and the back and argue areas of rice land were put under admirably suited to rice swamped the kodon and corresponding loss fell on the people. The area under rice (228,500 acres) though greater than in 1897-98 and 1900-01 was less than in 1898-99 or 1899-1900 and was 13 per cent below the maximum of 1894-95. The timely rain enabled the cultivators to put the large area of 112,874 acres under double crops and the gross cropped area of 619,000 acres was larger than for years past. The net cropped area of 506,000 acres declined to within 5 per cent of the maximum of 1894-95.

The area under wheat (61,304 acres) was higher than in 1894-95 and only 16 per cent short of the high figure attained at the summary settlement of 1885-87.

Eighty-eight per cent of the rental demand was collected within the year, and the revenue demand was collected in full, collection requiring only 110 coercive processes.

With the constitution of the new Drug District the boundaries of the Khalea area have changed and to obtain statistics for the present year 1905-06 would involve labour and delay; I do not therefore hold back this report. It is sufficiently clear that the tabili can easily bear the revised assessment and is likely to prosper under it. The new settlement, (wing to the abnormal conditions under which it was effected, is an extremely moderate one and may be confidently recommended for sanction. It will run for eight years, beginning with the lst July 1901.

10. The cost of the settlement caunot be stated, since the operations in Drug formed only a part of the scheme for revising the assessment of the whole of the Khalsa part of the district as originally contemplated. The Settlement Officer, however, estimates that the average cost was Rs. 77-0-7 per square mile, of which about Rs. 10 per square mile were spent on map correction and about Rs. 67 on assessment. This is moderate for rice country, in which settlement procedure is rendered extremely tedious and complicated by the enormous number of fields and holdings to be dealt with.

11. The settlement was effected by Mr. E. R. K. Blenkinsop, 1. c. s., to whom the settlement of the whole of the Khalsa portion of the district was originally entrusted. Probably no Settlement Officer has ever worked in more adverse circumstances. One famine succeeded another, and when a third seemed imminent much of his work had to be abandoned. His efforts, however, are far from wasted, for he completed much of the preliminary work necessary for the settlement of the rest of the district, operations for which have under the sanction of the Government of India been resumed. In addition to this saving of trouble and expense, the renewed settlement operations will also have the benefit of Mr. Blenkinsop's unrivalled local experience, and the valuable guidance which this report affords.

12. It appears also to be necessary to obtain the sanction of the Government of India to the redistribution of revenue of the Sanjari pargana to which reference is made in paragraph 106 of the Report.

This pargana was then part of the Dhamtari tabsil; it is now merged into a new Sanjari Thasil in the new Drug District.



Sectt. Press, Nagpur :- No. 1388, Civil Sectt, - 26-9-06-300-

REPORT ON THE REVISION OF THE LAND REVENUE SETTLEMENT OF THE DRUG TAHSIL IN THE RAIPUR DISTRICT

I joined this district in December 1897 as Settlement Officer, with instruc-scope of this Rotions to revise the settlement of the khalsa portion, taking up the Tahsils in the port. following order :---

1. Drug.3. Dhamtari.2. Raipur.4. Simga.

Although the settlement of the Simga Tahsil expired one year prior to that of the Dhamtari Tahsil, the former tract had suffered severely from the famine of 1897, whilst Dhamtari had escaped; and as all settlement operations had been delayed one year by the famine of 1897, it was decided to take up the Dhamtari Tahsil first, Simga thus getting an extension of two years without re-settlement. The Drug, Raipur, and Simga Tahsils had all been hard hit by the famine of 1897, and the failure in East Simga had been aggravated by short rainfall in 1895-96. In spite of relief having been administered on a scale till then unprecedented, desertions had been numerous, and there was much depression. The Dhamtari Tahsil had, however, escaped and had even benefited by the high prices ruling in 1896-97. In 1897-98 the Drug Tahsil was attested and map correction was effected in the Raipur Tahsil. In 1898-99 most of the Kaipur Tahsil was attested and map correction was carried out in the Dhamtari Tahsil.

The assessment of the Drug Tahsil was well in hand, but was suspended when a second and more severe failure became certain. In August 1599 the Land Record Staff, and shortly afterwards practically the whole of the Settlement Staff, were transferred to famine duty. After this famine of 1900, attestation was continued in 1901 in the regularly settled portion of the Dhamtari Tahsil and map correction in the three western circles of the Simga Tahsil. The rice crop of many villages of the Dhamtari Tahsil and of Simga (East) was seriously damaged by grasshoppers, and except for wheat the spring cropping failed all over the district. Wowards the end of the hot weather of 1901, I revised the Drug Tahsil with the assistance of Mr. Lakshman Rao, Assistant Settlement Officer, and submitted reports on the condition of the Drug Tahsil and on the rest of the khalsa. It was then decided to discontinue all assessment in the portion settled regularly by Mr. Carey, c. s., and to confine further operations to completing the map correction of the Simga Tahsil and to levelling up unduly low rents in the tracts settled summarily by Khan Bahadur Aulad Hussain, so as to bring this part also on to the soil unit basis prevailing throughout the province, and to a level with the rest of the khalsa where rents had been enhanced 13 per cent. by Mr. Carey, c. s., at the settlement of 1885 to 1889. The Drug Tahsil was then assessed and announced in 1902, the summarily settled tracts of Simga and Dhamtari were attested, and the map correction of East Singa was carried through. The rains of 1902, however, ceased abruptly about the middle of September, and many of the villages of the Raipur, Drug and Simga Tahsils, and a few of the Dhamtari Tahsil, are again plunged into famine. All further assessment was therefore stopped, and abatement proposals have been submitted for East Simga and the revenue of the Sanjari pargana of the Dhamtari Taheil has been re-distributed, the incidence of assessment having become very unequal by reason of the un-settled habits of the tenantry of this jungly tract. I have been instructed to confine myself in this report to dealing with the portion assessed by me, i. e., the Drug Tahsil. Mr. Carey's Settlement Report of the Raipur District was written in 1891. The district continued prosperous up to 1894-95, but just before and since I joined as Settlement Officer times have been very bad. The Drug Tahsil is very similar in the north and centre to portions of the Raipur Tahsil, with which it is conterminous, and in the south to the Dhamtari Tabsil. The agriculture and circumstances of the people are then as described by Mr. Carey, and a repetition of calculations made by him at paragraph 49 and elsewhere in his report and a description of the agriculture becomes superfluous. I propose, therefore, except for a reference to points not mentioned or only lightly touched on by him, to confine my remarks under these heads to showing to what extent the people of the Drug Tahsil have withstood

adverse conditions and to what extent they have succumbed. Where, however, my remarks are not entirely confined to the Drug Tahsil, it may be remembered that besides the 678 villages of that Tahsil, I have myself also inspected 883 villages of the Raipur Tahsil, 485 villages of the Dhamtari Tahsil and 351 of the Simga Tahsil, and that most of my crop experiments and much of my enquiry has been made outside the Drug Tahsil.

PART I.

Section I.-Geography.

Description of the Drug Tabsil.

The khalsa portion of the Drug Tahsil is bounded to the north by the 2. Simga Tahsil of this district, to the east by the Simga and Raipur Tahsils, to the south by the Dhamtari Tahsil and Dondi-Lohara Zamindari, and to the west by the Khujji Zamindari and the Khairagarh and Nandgaon Feudatories. It includes also the 8 villages of Wararbandh, which are held free of revenue and are at present under the Court of Wards. These villages are separate from the rest of the Tahsil and lie embedded in the Nandgaon Feudatory State. The Drug Tahsil constitutes the west of the Raipur District, and comprises the old parganas of Patan and Drug, together with the greater portion of the Dhamtari pargana and a large share of the Sanjari and Balod parganas. It has now for assessment purposes been divided into nine groups-Dhamda and Nankatti in the north, Drug, Bhilai and Arjunda in the centre, Patan and Ranchirai in the south-east, and Bhandera and Pinkapar in the south-west. Mr. Hewitt wrote in 1869: "Drug has no jungle whatsoever within its limits, and the whole of the tabsil is well cultivated." The same description still applies. It is all open undulating country, bare of hill or jungle. In the centre and north especially one can see the country for miles ahead from the bhata high ground and can make a point of any distance at speed without any guide, beyond verifying the names of the villages passed from time to time.

Rivers.

The tahsil is roughly of the shapo of an old boot, heel east, toe west, and 3. uppers north; it is bisected from south to north by the Tandula river, which is joined by the Sheonath river a little south of Drug. The Sheonath river, after touching the south-western edge of the tahsil or toe, crosses a corner of the Nandgaon State, and as it re-enters the Tahsil at the top of the instep is joined by the Karkara river and immediately afterwards by the Tandula river already mentioned. From this point this large body of water runs due north and is joined from the south-east by the Pathra and Barra streams and from the west by the Sombursa and Amner rivers. When the rainfall is heavy and continuous, floods occur along this system. The famine of 1896-97, caused by cessation of the rain in September, was aggravated by very heavy rain in the earlier months. The Sheonath flooded its banks on seven different occasions, and great damage was caused to the crops of riverside villages. Generally, however, serious damage results only at the junction of the large rivers. The south-east or heel of the Tahsil is skirted by the Karun river which thereafter runs through part of the Raipur Tahsil, supplying the Raipur Town water works, and again touches the Drug Tahsil at the trijunction of the Raipur, Drug and Simga Tahsils. Its principal tributary in the Drug Tahsil is the Kolidahar, which fertilizes the Patan pargana. The only other stream of importance is the Lor river which rises on the water parting of the Sheonath and the Karun and runs north-east to join the Karun in the Simga Tahsil. There are, however, countless other small streams and nullahs, and there is scarcely a village of any size which has not got a boundary nullah, by embanking which at the end of September at a cost of Rs. 5 to Rs. 10, a good water supply can be obtained for men and cattle, and a large area irrigated by lift for garden crops. Moreover, if these streams were systematically treated, the flood water could be drawn off so as to irrigate a very large percentage of the rice land along the banks and to supply storage tanks.

Description of groups.

4. The Pinkapar and Bhandera groups, the toe of the tahsil, form a level black soil plain, fringed to the south by the jungles of Dondi-Lohara, Sanjari and Khujji, and to the north separated by only eight miles of open country from Raj-Nandgaon. The Patan and Ranchirai groups, the heel of the Tahsil, are also in the main a black soil tract with kanhar resembling that of the open Dhamtari plain and eminently suited to rice cultivation. These two groups and the Dhamtari plain form the richest tract of the Raipur District; the Dhamtari plain has some superiority in double cropping, but these Drug groups are better supplied with tanks, and, whilst the cultivators of both are on a par for prosperity, the malguzars, especially of the Patan group, are singularly well-to-do and influential. The Bhilai and Nankatti groups and the east of the Arjunda group are on the watershed between the Karun river and the Tandula-Sheonath system. With some pockets of black soil, most of the villages lie high and have wide spreads of bhata. The majority of the tenants are Chamars, and of the malguzars, most are of the non-cultivating castes and many non-resident. There is an almost unlimited scope for improvement here, but during the years of prosperity, from shortly after Mr. Hewitt's settlement up to 1895, little or nothing was attempted, and the recent unfavourable years have been attended by considerable deterioration. The west of the Arjunda group and the Drug group lie along the Tandula and Sheonath; some villages consist wholly of black soil and in most black soil largely predominates, but there are a few high-lying villages on the fringe. The Dhamda group, bounded on the east by the Sheonath, on the south by the Sombarsa, and cut from west to east by the Amner, contains a few high-lying villages, but is distinguished by the finest kanhar in this or the Bilaspur District.

Wararbandh consists only of eight villages of fair size but inferior soil. It is included in the Pinkapar group and is distinguished by having the finest tank in the district.

5. The Great Eastern Road crosses the centre of this Tahsil passing through Drug and Bhilai, with Raj-Nandgaon 12 miles from the west border and Raipur 8 miles from the east border. This has always been the main channel for export and import into the Raipur District. The Bengal-Nagpur Railway was opened to Raj-Nandgaon in 1883 and to Raipur in 1889. It practically follows the line of the Great Eastern Road between these places. The principal feeder roads are from Drug through Nankatti and Dhamda into the Simga Tahsil through Deokar and Deorbija linking up at Bemetara with the Simga-Kawardha connection. From Dhamda a branch runs to Gandai. From Drug a road runs south to Gunderdehi, and another south-east to Dhamtari. Arjunda is linked with Raj-Nandgaon, and the south-west of the tahsil is crossed by a road from Raj-Nandgaon through Dondi-Lohara. Direct communication between Dhamda and Raipur is provided for by the Kumhari-Patharia Cross Road, and a link between the north of this tahsil and Raj-Nandgaon is being provided for by the Raj-Nandgaon-Deokar project. Work on these feeders provided the back bone of Public Works Department relief in the Drug Tahsil in the famines of 1897 and 1900. Mr. Hewitt in paragraph 33 of his report wrote: "But though roads can be laid out without much difficulty, it cannot be said that they can be kept easily in repair. Even metalled roads, unless the outer covering is unusually thick and well rammed, are soon ploughed up by the narrow wheels of the carts of the district, and in a few months the surface of the road is turned into an incoherent mass of loose stones which destroys the hoofs of the cattle and renders all progression except at a foot's pace almost impossible."

Country carts avoid metalled roads and prefer to make for themselves a softer track alongside, and in no case do they keep to the road, if even a short distance can be saved by going straight across country. During the rains cultivators are fully employed and traffic is at a standstill, whilst during the open season in the open country the country tracks are all that they require or desire. For utility all that is practicable or necessary is the making of approaches to streams and rivers with paved causeways where sand is very heavy or the bottom holding. Roads are not required during the open season, and unless metalled are useless during the rains.

Section II — History.

6. Mr. Hewitt settled the whole of the Raipur District, including the Previous assessments. zamindaris, and also the States of Khairagarh, Nandgaon and Chhuikhadan during the years 1864—69, and in his report he dealt with the history of the khalsa in paragraphs 46 to 88, giving in paragraph 88 the figures of the assessments

Communications.

immediately preceding his. This history was summarized and brought up to date by Mr. Carey at paragraph 8 of his report, and Mr. Hewitt's assessment was described in paragraph 66 to 72 of that report. The most remarkable feature of his assessment was the confidence with which he enhanced on his own estimate of the capabilities of the tenants to pay more rent, and the way in which his estimate was justified. In the Drug pargana, after a little initial opposition, the rental was at once raised from Rs. 29,370 to Rs. 70,074, or by 139 per cent. The total revenue then fixed for the Drug Tahsil was Rs. 1,32,113. That settlement was attended with a severe failure of crops in 1868, 1869 and 1870, which was well sustained at first by reason of the large grain stocks and the habit of the people of converting all superfluous cash into ornaments and spending practically nothing on display, but finally culminated in famine. For the rest of that settlement the seasons were favourable, and in the years 1885-87 Khan Bahadur Aulad Hussian effected a summary re-settlement of the Drug, Dhamda Deorbija, Nawagarh, Patan, Balod and Sanjari parganas. Absolute-occupancy tenants were enhanced by 11 per cent. and the revenue of the Drug Tahsil was raised to Rs. 1,72,392. The abstention of the Settlement Officer from enhancing the rents of the other classes was very distasteful to the malguzars, and they petitioned the Chief Commissioner. They were offered a 5-year settlement instead of 10 years as fixed, but not unnaturally this offer was not accepted. In some villages, notably in the Nawagarh Pargana (Simga Tahsil), the revenue enhancements were admittedly distributed amongst the tenants, and there is good reason to believe that this was done wherever the malguzar and tenants were on good terms, and the old opinions and ideas continued unaltered. Before Mr. Hewitt's settlement it was the practice to announce the revised revenue and to leave the gaontias to distribute the enhancement amongst the tenants. The same procedure was, to all intents and purposes, followed at Mr. Hewitt's settlement, and in view of the conservative tendencies of the Raipuri and his steady adherence to old customs, it is extremely probable that the same procedure was universally followed at the summary settlement, and further that where the malguzar had obtained some inkling of the half assots principle, he distributed considerably more than the revenue enhancement. In 1895.96 the map correction of the Drug Tahsil was taken up, with a view to revision of settlement, the period of settlement having been extended from 10 to 12 years in order to meet the exigencies of the settlement roster; and as already mentioned in paragraph 1 there was a famine in 1896-97, attended by high death-rates and considerable deterioration, and a far more severe famine in 1899-1900.

Agriculture.

Section III.—Agriculture.

7. The statement below shows the Tahsil cropping at the regular settlement (Mr. Hewitt's), at the summary settlement, and from 1895-96 to date :---

Period.	Wheat.	Rice,	Sugar- cane.	Til.	Lin- Feed,	Kodon.	Masur,	Teora.	Others.		Area double- cropped.	Net- cropped area.
	Acres.	Acros.	Acres.	Acros.	Астев.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres,
At Mr. Hewitt's	. 56,914	180,500	100	9,091	26,017	16,743	5,423	88	127,852	422,728	906	431,822
At last settlement	. 73,173	256,476	30	4,081	44,120	3,747	4,456	2,051	175,156	563,293	3 2,606	530,687
1895-96	51,377	203,085	155	2,890	51,379	107,012	5,264	23,212	09,225	603,579	85,475	518,104
1896-97	36,037	264,410	103	2,475	31,510	111,850	3,360	7,096	54,693	511,529	\$3,033	438,496
1897-98 (at attestation)	46,572	214,210	21	2,814	\$9,557	127,665	2,633	10,007	86,034	529,513	69,595	460,916
1898-90	63,774	230,711	7.	2,360	37,583	117,1:0	3,167	16,108	91,136	551,976	67,884	48#,112
1899-1909	\$9,570	241,681	6	2,257	4,795	127,730	1,344	1,215	35,610	454,208	1,198	453,010
1900-01 (at revision)	39,226	185,200	4	2,830	27,832	163,517	2,458	13,138	84,551	518,746	53,184	465,862
1901-1802	54,339	211,€53	43	2,593	24,887	129,862	2,459	4,928	74,989	603,153	32,831	472,372

Cropped area classified according to crops.

The figures for kodon-teora and double-cropping at Mr. Hewitt's settlement are incorrect. The figure for kodon at the summary settlement is incorrect; in most of the misls kodon is not separately shown, but is included under "Others." This and the fluctuations in the double-cropped area explain the fluctuations under "Others."

The correct figure for rice at the summary settlement is as now shown. The figure in the Preliminary Report, which was also taken in the Revision Report, was wrong. The closer check exercised at the time of writing the C notes disclosed the fact that in many of the summary misls the double-cropping was added to the rice area. This explains a decrease of 21,631 acres in the settlement rice area and the increase under the head "Others." Many minor discrepancies were detected when writing the Rent-Rate Reports both in the summary misls and in Mr. Hewitt's misls in the totalling of crops, rents, rights and areas, but the only other serious alteration that has had to be made under the head "Crops" is the decrease of 101 acres under sugarcane at settlement.

Rice is by far the most important crop in every group of the Tahsil. Decline in the rice In 1896-97 rice reached its maximum and covered 264,410 acres or 54 per cent. of the net-cropped area, varying from 60 per cent. in the south-east and centre to 40 per cent. in the north-west.

Ries is the one crop which cultivators in Raipur consider important, -and they make every effort to maintain their rice area. All spring crops are liable to variations due to the ground being in some years too dry to sow, and the double-cropping (utera), which depends on there being moisture in the rice fields at the time of broadcasting, is liable to extreme variations. The area placed under rice is a certain test of the condition of the people, and very many cultivators, speaking of the land they hold, mention only the rice area, omitting all area under other crops. Judged by this test, the figures of 1897-98 show serious depression in the north of the Tahsil, less in the centre and south-west, and very little in the south-east; whilst the figures of 1900-01 show depression all over the Tahsil.

The rice area in 1900-01 (185,200 acres) was 30 per cent. below the figure for 1896-97 and 28 per cent. below the settlement rice area. In 1901-02 the shortage since settlement amounted to 18 per cent.

9. The wheat area at the summary settlement was 73,173 acres or 14 per Other fluctuations cent. of the net-cropped area, but the seasons succeeding settlement were un-wheat. favourable, and by 1894-95 the area under this crop had declined by 22 per cent.

Wheat is only sown by substantial tenants; in 1896-97 wherever it germinated it gave very good yields owing to favourable cold-weather rain; the short areas in 1896-97 and 1899-1900 were due to the ground being too dry for germination, and the shortage still continued in 1900-01 because some could not afford the seed for this expensive crop. The wheat area is now almost equal to that of 1894-95 though still 26 per cent. below the summary settlement area.

10. The most noticeable feature of the kodon cropping is that where Kodon. Hindus predominate there is a marked increase in area after a famine year, but where Chamars predominate there is no such fluctuation. The Hindus do their best to maintain the cultivated area, and if they cannot get enough rice seed, sow kodon, which is much less expensive, as less seed falls to the acre, whereas many Chamars sow what rice they can get and do not trouble about any other crop. The full area under kodon at settlement cannot be ascertained, as in most of the parganas it was not entered separately. In 1895-96 it covered about 20 per cent. of the net-cropped area and reached its maximum in 1900-1901, when it covered 35 per cent. of the reduced netcropped area.

11. Double-cropping depends entirely on the rainfall of the last half of Double-cropping. September and beginning of October, and therefore exhibits the most extraordinary fluctuations. For the whole district it has varied from a maximum of 661,000 to a minimum of something under 21,000. The figures of a good year afford a very useful criterion of the quality of the rice land. In this

Tahsil the double-cropped area varies from a maximum of 125,301 acres to a minimum of 1,198 acres. In the south-west three-fourths of the rice land is double-cropped in a favourable year, whereas in the Nankatti group in the north-east the proportion is only one-fourth.

The year 1900-1901 following the great famine was very favourable to double-cropping, and a short area in that year showed lack of resources. Judged by this test, the centre and north of the Tahsil are much inferior to the south.

12. The normal percentage of new and old fallow may be judged from the year 1894-95. The figures of that year are as follow :---

Net-cropped.	New fallow.	Old fallow.
534,322	52,136	7,173

The old fallow area is, I take it, singularly small for any part of these provinces other than Raipur and Bilaspur, but here it is not remarkable; cultivators will not leave a field fallow for more than one year, if possible, for fear that some neighbour will cultivate it and so establish a right to it. The Tahsil normal amounts to a little over 1 per cent., and has even now increased to only a little over 2 per cent.; in the north-east it amounts to $5\frac{1}{3}$ per cent. and in the north-west to 4 per cent., whilst in the south it is still below 1 per cent.

The occupied area has increased by 1 per cent. only since 1894.95; and the old fallow area being also trifling, it may be taken for practical purposes that the net-cropped and new-fallow areas vary inversely. The Tabsil figures for new fallow are :--

1895-96.	1896-97.	1897-98.	1898-99.	1899-00.	1900-01.	1901-02.
67,929	1,01,122	1,26,636	1,04,873	1,37,394	1,18,740	1,14,562

The large new fallow area of 1896-97 was due to lack of moisture for spring sowings, and the same remark applies to 1899-00, except that 23,000 acres of rice land were also left fallow. But the next year, although the rice area fell by 50,000 acres, the cropped area was more than maintained. This was due to a very large increase under kodon and to there being sufficient moisture for spring sowings. The present new fallow area is rather more than twice the normal. The Dhamda group comes out best in the new-fallow test, and this confirms the statement made later on, *viz.*, that the malguzars deliberately got rid of tenants in order to cultivate the land themselves.

Occupied area.

The increase in the occupied area since the summary settlement is only 8 per cent. and since Mr. Hewitt's settlement 32 per cent. The Pinkapar group was especially fully cultivated at Mr. Hewitt's settlement, the group increase since then being only 10 per cent. These increases, small as they are, have to be discounted by the fact that the tabsil area was found to have increased owing to more accurate survey in 1889 from 711,902 acres to 745,714 acres or by $4\frac{1}{3}$ per cent. Over 63 per cent. of the total area was in occupation at Mr. Hewitt's settlement, $77\frac{1}{3}$ per cent. at the summary settlement, and 80 per cent. now.

Net-cropped area and fallow.

	Summary settle- ment	18 94- 95.	Increase or decrease per cent. since summary settle- ment.	1897-08.	1898-99.	1899-00.	1900-01.	umn 8 over summary settle-	Increase or decrease per cent. of col- umn 8	Bemarke.
1	2	8	4	5	6	7	8	9	10	11
	Acres.	Acres.		Acres.	Acres.	Acres.	Aeres.	[[
Area under rice	236,476	263,830	+ 3	214,210	280,711	241,681	185,200		30	Kodo in-
Do. kodon	Not avail able.	70,500		127,665	117,130	127,730	163,517		+132	cludes kodo til and kodo
Total Kharif	Do.	426,927		406,076	410,223	3\$8,931	410,621		-4	rabar.
Wheat	78,176	56,432	23	46,572	53,774	39,570	39,226	-46	-30	
Total Rabi	Not avail able.	232,696		123,062	141,753	65,277	107,240		-54	
Total cropped area	563,293	659,623	+17	529,513	551,976	454,208	518,746	-8	-21	
Area double-cropped.	82,606	125,801	+ 284	68,595	67,864	1,198	53,184	+ 63	58	
Net-cropped area	530,687	534,822	+1	460,918	484,112	453,010	465,562	-12	13	
New failow	5,669	52,136	+ 820	126,631	104,873	137,894	118,740	+ 1,995	+128	
Old fallow	15,308	7,178	53	11,190	10,113	9 ,556	11,676	24	+ 63	
Total occupied area	551,665	593,681	+8	598,739	599,098	599,960	595, 97 8	+8	Nil.	

13. The condition of the Tahsil in 1901 after revision was found to be as summary of fluctuashown in the next table ---

This was then (1902) noted on as follows :--

The rise of 132 per cent. in kodon is due to the substitution of the cheaper kodon for rice and to the present cycle of years with little and uncertain rain at the end of the monsoon. Kodo is a crop which does well with a light rainfall. The area under rice shows a diminution of 30 per cent. since 1894-95, but this is largely temporary and due to the impossibility of obtaining seed. There will be some recovery this year, but I am afraid that it will take two or three good seasons to reach the level of 1899-00, as credit is impaired and many of the village mandals (lenders) are reduced and unable to make their usual loans. The decline in the wheat area between settlement and 1894-95 was due to seasons unfavourable to this particular crop. The present figure is equal to that of 1899-00, but in that year the shortage was due to the ground being too dry to sow, whereas this year the shortage is due to inability to pay for sced. The increase in total cropping between settlement and 1894-95 was almost covered by the increase in double-cropping, which is a very variable factor, depending as it does on the September-October rainfall being heavy; nevertheless, in spite of an increase of 63 per cent. in double-cropping since settlement, there is a net decrease of 8 per cent. in the total cropped area and a decrease of 21 per cent. since 1894-95. The decrease in the oropped area is 12 per cent. and 13 per cent. only, but this decrease is more or less constant since the famine of 1896-97 and is a mark of deterioration, the shortage being largely confined to a limited number of villages where the percentage of decrease is high. The new fallow area of settle-ment is impossibly small, looking to the large amount of bhata, which requires resting fallows, and the figure of 1894-95 may be taken as normal. The increase since then is serious and is found during the last four years, the high figures of 1897-98 and the present year being due to famine and the still higher figure of 1899-00 to the impossibility of sowing the ground for want of moisture. Old fallow and new fallow amount to 22 per cent. of the occupied area. The old fallow area at settlement is unduly high, because much grass land was included in the occupied area and shown as old fallow. The present old fallow area is much below the mark, judg-ing by the continued deterioration of a fair number of villages, but it is one of the most difficult points in Land Record work to get old fallow correctly recorded; and of course in a village which is half fallow for four years, the old fallow area is not necessarily very large, as different "khars" are left fallow in alternate years.

It was then noted that 208 villages were in a depressed condition, and that in 46 of these the depression was due to causes other than famine, viz, oppressive malguzars and turbulent tenants. The remaining 470 villages were in fair to very good condition. Last year, viz, in 1902, the net-cropped area increased in round numbers by 7,000 acres, 1,000 acres passed into old fallow, but the new fallow area was reduced by 4,000 acres only. The area sown with rice increased by 26,000 acres or 14 per cent. and the area sown with wheat by 15,000 acres or 38 per cent., and nearly reached the area of 1894-95.

Ramfall.	
----------	--

14. The rainfall for the years 1867-68 to date is given in the table below:---

Ге	riod of rainfall.		1st June to Slst August.	September to October.	November, December and January.	Balance.	Total.
1867-68		•••	18.38	8·21	2.13	3.02	26.7
1868-69			23.10	1.90		1.20	26.20
1869-70			26.70	2.50	0.83	1.77	81.8
1870-71			3 0.00	15.00	1.30	0.71	47.0
1871-79	•••		30·28	6.20		0.99	87.4
1872-73			51-85	7.20	0.30	1.94	61·2
1873-74			22-54	10.05	0.32	1.81	34.5
1874-75	•	***	53 ·20	9.40			62-6
1875-76			27.63	7.13			34.7
1876-77			19.94	12.27	2.28	2.68	37-4
1877-78			25:28	1.92	0.64	4.92	 82·7
1878-79			20.50	9.66	3.20	1.20	3 3 ·8
1879-80			27.59	10.92		1.20	3 9·7
1880-81		••••	\$2·83	9.86	0.11	0.66	43.4
881-1682			22.43	5.17	1.36		28.8
882-1883	•••		38-08	3·21	1.61	1.76	39.6
883-1884	•••		21.57	8·98	0.67	2.53	38.4
884-1885	***	•••	5 9 ·72	16-59	2.23	2.77	81.3
685-1886	***	•••	45·82	5.70	\$∙50	8.54	68·1
886-1887	***		22.59	8·83	0.20		32·0
887-1888	•••		42·5 0	11-93	0.22	0.83	55-3
888-1889			34-58	7.40	2.27	0.68	44-9
889-1890			45-15	11.83		0.50	57·8
890-1891	•••		28-03	9.60	S ·65		41-2
891-1893	•••		83-44	15.80		0.10	49-3
892-1893			52 ·67	4.61	4.75	5-84	67-8
898-1894			87.91	14-91	1.65	0.29	55·0
894-1895			49-54	2 1·59		2.73	73-8
895-1896			49.02	10.69		0.75	60-4
698-1 89 7			71.47	5.28	2.23	S·34	82.6
897-1898			80-83	6.84		2.74	60-4
898-1899			56.79	9·0 3		2.76	68.5
399-1 900			84.46	4.95	•71	2.14	41.6
900-1901			26.20	19.69	·52	5.23	50-9
901-1903			89-47	7.66		-55	40.6
802-1903]	21.71	5.41	-52	_	

The rainfall has been shown separately for the four periods selected by Mr. Carey in his Settlement Report. In the first period the rice is sown during the month of June in the dry (khurra) in black soil after a preliminary shower, or "batar" in all soils when heavy rain begins to fall, or by planting after germination if the early rainfall is very heavy (Lehi). The operation of biasi should be carried out in the latter half of July. Heavy rain is necessary for this; if delayed, the harvesting is also put back, and if not performed at all, only 50 per cent. of the proper yield is obtained. After biasi a fair amount of rain is necessary for the plants to set. Weeding is then necessary, and as many cultivators have more land than they can efficiently manage, this operation continues well into September. There should be a fair amount of water in the fields for good weeding. The rainfall of the second period is of the utmost importance. If fair rain is received up to the end of September the early rice is secured, but for a bumper crop another shower in October is required. The late rice requires rain in October, although in the absence of October rain a fair yield may be obtained if the late September rain has been heavy and embankments have been carefully looked after. Good rain in October also guarantees the unhari cropping against everything but cloudy weather and excessive rain. In 1902, there was no rain after the end of September, but wheat, which requires more moisture than other spring crops, gave an outturn of from 12 annas to 6 annas (90 to 45 American Notation) according to the quality and retentiveness of soil and carefulness of cultivation With good October rain wheat can give a full yield, but for a humper, rain is necessary in the third period. Rain in December and January is harmful to other rabi crops. Rain in the fourth period improves the grazing, enables the good cultivator to plough his fields and freshens up the water-supply, but often does damage to the crops heaped in the bearas (places for storing the crop prior to threshing and for threshing).

The short rainfall of the years 1867-70 culminated in a severe famine, but if the figures are quite correct, it is an extraordinary testimony to the staying power of the people at that time that famine conditions should not have developed till 1869. The rainfall recorded at Drug in 1899-1900 was :---

	June to August.	Septe	mber and October.		
	34.49	- HORA	4-25	==	88.71
and at Simgs	a 26.61	rila	2.55	=	29.46
The three years me	ntioned com	pare :	as follows :		
1867-68	18.38		3.51	=	21.29
1868·6 9	23.10	•••	1.90	⇒	25.00
1869-70	26.70		2.50	=	29.20

Each of these years is below the Simga figure and two of them are well below; such a failure in these days would have cost Government erores. 1877-78 and 1882-83 were also bad years for rice. In recent years the rainfall of September and October has been very capricious, falling in one village and not in another, so that the task of revenue administration has been rendered exceedingly difficult. This was especially the case in 1901-02 and 1902-08. The distribution is all important, the record rainfall of 82.60 resulted in the famine of 1896-97, whereas eleven years with a fall of less than 40 inches have left no mark on the history of this Tahsil.

I cannot explain the year 1877-78 except on the understanding that the staying power of the people was not by then impaired; prices rose sharply. The table of rainfall clearly demonstrates the extreme importance of good and general rain in September and October. Cold-weather rain (of the third period) is very beneficial to wheat which otherwise suffers severely from the ravages of white-ants, unless the field is embanked.

15. The usual method of irrigation in this tahsil and district is from Irrigation. tanks by outting the bank. This is not generally done, however, unless the crop is likely to fall below S annas (60 American Notation). In a year of good rainfall there is very little irrigation. In 1858-89 only 2,413 acres were irrigated. The tanks are mostly small with inferior catchment areas, and do not hold much water if the rainfall of the first period is short and well distributed. In black soil tracts especially at least two or three heavy bursts of rain are necessary to fill up the tanks. In time of necessity therefore these tanks often prove of but little utility. In 1899-1900 only 17,995 acres were irrigated from tanks. When the water has been let off by cut, there is seldom sufficient left in the bed of the tank to be of any use for drinking purposes for men or cattle, and the tank usually dries after 3 or 4 months. As this residue will serve no other purpose, it might be supposed that the cultivators would ladle it out for their fields by lift, but this is rarely done and only by the most energetic cultivators.

Tar irrigation is effected by embanking small nullahs near their source and diverting the water to the fields or to storage tanks, or by temporary bunds lower down the stream made in September, when it is expected that there will be no more heavy bursts of rain. The second class of irrigation is uncertain; as if the rainfall of September is heavy and sharp, the bund is swept away before it serves its purpose. Cultivators show great knowledge of levels in choosing the sites for the bunds and in aligning the distributaries. Some of them also show considerable enterprise. I have seen a Muhammadan malguzar cut his distributary through a ridge of high land to a depth of about 15 feet, the width being only $1\frac{1}{2}$ feet, so that the work was not very expensive. Two malguzars in this district have attempted to solve the difficulty of the second class of bund referred to above (i. e., bunds remote from the source where the flood-water cannot be resisted except at great exponse and with the loss of much valuable land by submersion) by constructing hunds made of stone pillars on a well sunk foundation fitted with shutters working in slots. The shutters are removed to allow the flood-water to pass, and dropped directly the flow has moderated. Both malguzars were hampered by being unable to get suitable sites outside the limits of their villages. The first bund, at Bargaon, takes water to the fields, but the storage tanks cannot quite be reached ; the second was altogether ill placed.

The great obstacle in the way of this form of irrigation is the difficulty of securing sites for bunds and ground for the distributary or diversion canal, sufficiently high enough up the stream; e. g., to irrigate village A, it may be necessary to tap one mile up-stream; within the limits of village B. The people of B will not allow the bund to be made or part with the land needed for the channel of diversion on any terms.

In most villages there is some irrigated garden cultivation, generally from wells, scattered about the village site, whose water-supply depends on the village nistar tanks, and sometimes along the banks of streams in which the late flow has been bunded up or by sinking temporary pits. This form of cultivation could be extended enormously if the cultivators had the requisite energy and time to spare, and if the demand for garden produce was sufficient.

Irrigation wells near the village-site are generally dug out of the bhata soil, with a diameter of about 3 feet, to considerable depths at trifling cost without any lining, but sometimes they are faced with stone. During the rains rice is grown, and irrigated, if necessary, giving very heavy yields, and during the cold and hot weather chillies, onions and other garden crops. The water is raised by means of a lever lift and oil tin.

Cultivation of yams and vegetables is also carried on in the sandy beds of rivers, and in pal-kachhar or silt deposits very rich crops of wheat, barley, oats and garden preduce can be had. At points along the Karun river and some other streams that hold water all the year round, the formation is peculiar. Although the banks are low, the land instead of rising shelves away for some distance. A malguzar of the Drug group made enquiries in Bombay for a pump, but was deterred from purchasing owing to the difficulty and cost of getting repairs done. I noticed a similar conformation in the Simga Tahsil in the village and neighbourhood of Deokar.

16. Mr. Carey discusses the question of irrigation in paragraphs 16 to 18 of his report. Only 55 per cent. of the area under rice in the regularly settled area was marked as irrigable. In the famine of 1896-97 most of the village

work relief was provided by petty works undertaken by malguzars with famine loans; these works were for the most part repairs of tanks, but as these tanks had been neglected for years, no more was effected than a slight return towards the protection afforded in the past. In the Drug Tabsil 21,860 acres of rice land has been marked as irrigable from tanks and 2,181 acres of rice land from other sources = 9 per cent. of the settlement rice area; but all over the Drug Tabsil and all over the district irrigation tanks have been allowed to fall into disrepair, and in bighlying tracts there are to be found traces of many tars, by means of which the rice land used to be irrigated, but which have also been abandoned. Tar irrigation is peculiarly suited to the Raipur District, at any rate in the highlying villages, but the embankment diverting the nullah requires constant attention and repair when made with earth, as it almost invariably is. The area shown as irrigable was marked in 1898. The addition to the protected area effected by the village works made at Government expense in 1900 has not been included.

17. One of the veasons assigned for the neglect of irrigation facilities, in which this district abounds, is that the rainfall is generally ample for broadcest rice, but when submitting my Preliminary Report on the Simga Tahsil I had occasion to point out that unless the rainfall statistics of Simga were very inaccurate, the cultivators of that part must have had plenty of warning. Taking as standards 24 inches for the first period, that is June to August, and 6 inches for the second period, September and October, and assuming that if the rainfall of either period fell below these minima, there would be a measure of crop failure, at any rate sufficient to teach the people caution, these conditions were found in ten years prior to the commencement of the present series of bad seasons.

In the years 1883-84, 1886-87, 1887-88 and 1888-89, the rainfall was less than in the great famine of 1899-1900, and in addition to these bad or doubtful years, there is also the admitted famine of 1860. This resulted from short rain in 1867-68 and 1868-69, the figures being 22 72 and 23.80 inches for the first two periods as against 29.46 in 1899-1900.

Mr. Carey at paragraph 14 of his report mentions that around Simga there is a circle of villages within which the rainfall is often short, and if the recorded figures are correct, with 12 bad years out of 22 between 1867-68 and 1888-89, it can hardly be said that the rainfall is generally sufficient. In fact it might rather have been expected that this tract would have been utterly prostrated, unless far more attention had been paid to conservation of the water-supply than has been the case in parts inspected by me. Mr. Dunne, Assistant Settlement Officer, in his notes for minor famine works, makes mention of many tars in this part, and it may be that this explains the absence of special deterioration. I have not had an opportunity of inspecting this tract, but I am inclined to suspect the accuracy of the statistics for rainfall.

In the other Tahsils the rainfall has generally been sufficient, if not always for good erops at any rate to prevent serious failure. In the Drug Tahsil, as already mentioned, there was a severe failure in the rainfall from 1867 to 1870, and failure in the second period of 1877-78 and 1882-83. This should have been sufficient to alarm the cultivators and impress upon them the necessity of doing their utmost to render as much as possible of their rice area secure.

18. Another reason assigned for the neglect of improvement is the lakhabata system. Under this system overy cultivator holds an equal sharo of every soil and position; the sub-division resulting from this is extremely minute, and in many villages there are more than 5,000 fields and in a few 8,000 to 11,000. This principle is very thoroughly followed out, and in cases where the villagesite has been changed, the old site has been carved up into tiny strips, so that on the map it resembles a spider's web, and has to be plotted on a larger scale (the scale of the village map is $16^{\prime\prime} = 1$ mile) in order to insert a single figure for the identification of each plot. As, therefore, neither the malguzar nor any cultivator has, as a rule, a chak or group of fields, and it is not usual to charge water-rate, there is no inducement to effect an improvement which will benefit all, but will confer very little benefit on the maker. Lakhabata originates with the Chamars, and the essence of lakhabata and of the Chamar creed is equality and fraternity. If the necessity of protecting rice land had strongly impressed itself, that necessity would have been met by joint action, the poorer cultivators working themselves and the well-to-do sending their sonjyas. Instances of such joint action, though not many, are sufficiently numerous to show how the difficulty would have been solved.

19. The explanation does not, I think, lie wholly in the absence of necessity or the difficulty of solution. It lies rather in the character and circumstances of the Raipuri. Accustomed in the past to absolute simplicity and selfdependence, using grain for cattle or as fuel or sometimes leaving it to rot, entertaining his caste-fellows in hundreds, it is true, at weddings and other festivals, but providing nothing but the produce of his own farm; providing his own scanty clothing from his own cotton patch, his own oil, his own gur and his own tobacco, he had no cash expenditure to meet but the demand of the over-lord and the payment for salt; but with a cowrie currency (paragraph 209 of Mr. Hewitt's Report) even these payments were met with some difficulty. (It must have been under conditions similar to this that importance was attached to the salt-tax which now presses so lightly.) In a rice-cating country, with no export, rice was the only crop which brought in money, and to this crop he devoted great attention and care. Looking to the great increase in the area under rice, and to the retrogression in tar irrigation and repair or construction of tanks, it is highly probable that in those days quite 50 per cent. of the rice area was protected or cupable of being protected, and that the remainder received a much greater supply of surface water from the large waste areas. This being so export sprang up, prices rose twelvefold in fifteen years (paragraph 150 of Mr. Hewitt's Settlement Report), cultivation trebled in ten years (paragraph 149 of the same report). The Government demand, which in old days had to be paid under severe penalties, of which loss of the land was probably the least, under British rule kept no pace with these startling changes (paragraph 88 of the same report) :--

		at this with the	Bs.	8,	р.	
Assessment in	1855-57	NER CONTEN	2,78,536	5	8	
Do.	1855-60		3,11,192	11	4	
Do.	1861-62	सत्यमंब जयत	3,17,819	10	4	

Mr. Hewitt wrote his report in 1869, and he raised the revenue demand to Rs. 5,31,470. This covers the period of the changes mentioned and the Government demand was not even doubled in response to cultivation trebling and prices rising twelvefold. Silver was substituted for cowries, the salt payment at once became insignificant, and the Government demand, hitherto the only incentive to industry, became an almost negligeable quantity, and deterioration at once set in. It might be thought that the famine of 1869 would have acted as a severe corrective to this tendency, but that is fate; if God wishes to destroy he can withhold the rain for ten years just as well as for three, or he can send small-pox or cholera. The only constant and intelligible incentive to industry was now missing. His requirements were unchanged, while his cash assets had increased enormously. The newly-broken land yielded plentifully and seasons were on the whole very favourable; an occasional had season here and there made no impression. The tendency to negligence was further increased by the opening of the Railway to Raj-Nandgaon in 1883, and a further rise of prices. In response to this rents were practically left unaltered at the recent settlements. In the summarily settled tract only absolute-occupancy rents were raised, and by 11 per cent. only. In the regularly settled tract rents all-round were raised by only 13 per cent. In the meantime malguzars had ostensibly not interfered with rents, except in isolated cases, confining themselves to levying nazranas on transfers, and fixing higher rates on new settlers. Thus we come to the present series of bad years commencing with 1895-96. How the people ought to have resisted the light trial of 1896-97 can be inferred from considering the lonient treatment they had received at the hands of Government. What actually happened is too well known to bear repetition. The

prostration of 1900, when there was a total failure of every crop, was only to be expected from the figures of 1897, when in spite of relief on a scale, till then unprecedented, there was a very high mortality.

20. If the above presentment of the case appears conjectural or to have been pushed too far, it still remains to be noted that it is not confidence in the rainfall, it is not the lakhabata difficulty which prevents a man, when his rice crop is drying from want of water, lifting water 2 feet from a surar (overflow cut from a river) into his field; it is not confidence in the rainfall nor the lakhabata difficulty which prevents him holding up the water of a gently flowing nullah at a cost of Rs. 5, and irrigating the rice along the banks; it is not confidence in the rainfall nor the lakhabata difficulty which prevents a man digging a small well when water is near the surface at a cost of two days' work. Nor is it ignorance; a cultivator here and there does these things and saves his crop, and fifty with fields adjoining his do nothing. In 1900 a malguzar and tenants blocked up a stream and saved 30 acres of rice by lift. In 1902 (the present season) the failure not being quite so complete, they were allowing the crop in this area to dry off, till one of my Inspectors, sent out to encourage well-construction, took the work in hand; he arrived on the scone so late, however, that only 7 or 8 acres of this area could be partially saved. Finally, it is not the lakhabata difficulty which prevents a man repairing his own rice banks. Confidence in the rainfall and the lakhabata difficulty are strong reasons, but they would not so entirely prevail, were it not for the habit of neglect which has crept in. The failures of 1897 and 1900 have been of use in alarming the people. Distinct improvement was perceptible in the hot weather of 1902 in the amount of embanking of rice land that was going on, unprecedented in my experience and according to the statements of the patwaris and cultivators. The small export of rice in 1902 suggested that the people were building up their grain reserves, which have been neglected in late years, and enquiry confirmed the impression. I have also heard of some new tars being constructed by joint effort during the rains of 1902, directly the weakness of the rainfall excited alarm. The present failure should accentuate the necessity for protection, and it may be that, as the increasing supply of luxuries, unknown in the past, has largely increased personal and festival expenditure, the relapse into neglect and indifference with the return of good seasons will not be so marked as in the period before the recent bad years.

In the Drug Tahsil 21,860 acres have been recorded as irrigable from Recent tanks, 1,285 acres by lift from wells and nullahs, and 2,181 from other sources, i. e, by tars. There were 1,893 tanks at attestation, or nearly 3 per village. The distribution, however, varies greatly from Patan and Ranchirai with 5 and 4 tanks per village to Bhandera and Pinkapar with 1 and 1. The highest area recorded as irrigated in any year for which figures are available is 22,315 acres. In 1896-97 the malguzars, often reluctantly, effected repairs of old tanks and made some new ones, taking improvement loans, which were subsequently mostly converted into famine loans without interest and with a drawback. The irrigated area of the Tahsil rose from 12,088 in 1896-97, the previous maximum, the rainfall of the first period of that year having filled all tanks to overflowing, to 22,315 in 1897-98. In 1900, however, only 3,527 acres were irrigated, of which 3,075 acres were from tanks. In that year 53 new tanks were made in this Tahsil, 27 enlarged, and 216 repaired at Government expense as works under Civil control, but the statistics do not indicate that any extension to the irrigated area was offected thereby. In 1901-02, a year of necessity, only 16,415 acres were irrigated compared with the previous maximum of 22,315. The figures for the present year 1902-03 are not yet available.

The improvements made under Civil agency during 1900 were reported on by me for the information of the Irrigation Commission; I then estimated that 23,000 acres had been added to the irrigable area at a cost of 100 per acre.

This report was prepared in January 1902, some months before the regular statistics were available. The figures of the annual record now show that in that year 61,868 acres were irrigated, against a previous maximum of 42,420 improve-

ments.

	Tahsil.		Previous maximum and year.	Irrigated in 1901-02.	
				Acres.	Acres.
Drug				22,315 in 1897-98.	16,415
Simga	v = •			17,588 in 1896-97.	10,859
Raipur			[21,725 in 1896-97.	34,857
Dhamtari				10, 626 in 1896-97 .	12,490

acres in 1896-97, when as already stated all tanks were filled to overflowing. Some of the improvments were, for various reasons, not utilized. The result by Tahsils is as follows :---

The Raipur Tahsil gives the best results with an increase of over 13,000 acres over the previous maximum. This result was largely due to careful selection of works by Mr. C. A. Clarke, c. s., Famine Charge Officer of North Raipur. In the Raipur Tahsil masonry sluices were built into most of the new tanks, so that the water might be drawn off not only in case of considerable failure but also when even a small benefit would accrue therefrom. Cultivators are too indifferent to cut the tank bunds except in the event of a considerable failure, and I have seen the gaps when made left open during the following rains thereby totally destroying the utility of the tank. In 1897 the Morid project was suggested by the malguzar of Aundhi, and he was willing to spend Rs. 12,000 on it. The construction was, however, taken over by the Public Works Department. It irrigates a large area. Two very good projects, Marowda and Khapri-Aranda, are under construction by the Public Works Department, and a good deal of work was done on the Sanjari tank, a useful protective work.

Encouragement of improvement.

22. When I first joined this district in 1896 as a Famine Charge Officer for the Drug Tahsil, in view of the reluctance of malguzars and well-to-do tenants to take improvement leans and the lakhabata difficulty, I recommended the exemption of areas from assessment proportionate to the expenditure. I have only just discovered, when on the point of leaving the district, that this was the system followed in the past. A small area proportionate to the expenditure was set apart from lakhabata for the improver free from assessment. This area was generally adjacent to the tank in a position to benefit by its water, but was not necessarily so. If land near the tank could not be set apart, it was given elsewhere; but from the fact that this land was almost always irrigable, the name of this form of muafi, tarhatti, became a term for irrigation, and is mentioned in the last Settlement Reports of the Bilaspur and Raipur Districts as synonymous with pajra and chuhri. This form of muafi was not, however, recognized at Mr. Hewitt's settlement and the land was assessed. The term tarhatti is now seldom heard and is only understood by the older generation. The terms for irrigation are pajra, chuhri, ogra for percolation; uchhla, and paithu for back or overflow; chhapa or chichkar for irrigation by lift from a tank and pallu by cut.

At paragraph 28 of his report Mr. Hewitt speaks of grants of rent-free land for digging wells. I have not come across any trace of this, but in any case the wells were probably for drinking and not for irrigation.

Land irrigated by improvement is now exempted from assessment for the term of the following settlement. The amount so exempted in this Tahsil was only Rs. 340-2-0 and the sums remitted were so small that I felt ashamed to announce them. The cause of this was partly that, as will be explained later on, no higher factor for irrigation was imposed on the gabhar position in which

much of the land benefited is found, but chiefly because, owing to lakhabata, so few of the maker's fields are benefited. In other Tahsils I have recommended that irrigated land of the maker, other than that improved, should be exempted from the irrigable factor with a limit of one acre for every Rs. 15 of expenditure. Unfortunately however something much more even than this is necessary for effective encouragement. Rents are so stagnant and low in this district that they can and ought to be very fully enhanced when better times return; but the cultivator does not understand our system, and however carefully the soil classification may be done, it can seldom agree holding by holding with the cultivator's own estimates, and in this district the results diverge from local expectation to a marked degree, e. g., the cultivator prefers a holding of mixed soils to a holding of any one soil, even if that soil be kanhar, but the kanhar holding will have a valuation double that of a mixed holding. Thus \mathcal{A} , who has made an improvement, holds 10 acres of kanhar on a rent of Rs. 5. B, who has not, holds 10 acres of mixed soils on a rent of Rs. 6. The valuation of A's holding without taking into account the improvement will be Rs. 10 and of B's Rs. 5. A will be enhanced to Rs. 7-8-0 and B's rent will remain at Rs. 6. The extra valuation due to the improvement may be Rs. 2. This amount is remitted, and also Rs. 2-8-0 has been remitted because A's rent cannot be enhanced more than 50 per. cent per saltum. Nevertheless A has been enhanced and B has not; A thinks that he has been enhanced because of his improvement. How can he be persuaded that his improvement has been exempted?

In order to stimulate improvement, where it is so much neglected and yet so much to be desired, much more decided action than the exemption of improvement from enhancement is necessary, because enhancement on the ground of improvement and enhancement on general grounds are not clearly distinguished by the cultivator. If it were announced that any tenant, who spent a sum equal to 25 times his present rental on improvement, would, after verification, be exempted from enhancement at the next settlement, substantial results might be obtained.

A canal to irrigate the villages in the water shed of the Karun and Improvements 23.Sheonath rivers has been surveyed and recommended for construction; existing tanks along the line will be enlarged and other storage tanks made if this project is sanctioned. It should be of great benefit to that portion of the Drug Tahsil which suffers most from a short rainfall.

24. During the rains of 1902 I was directed by the Commissioner of Experiments Settlements and Agriculture to dig 6 to 10 wells to test the utility of this form of irrigation for rice. Accordingly I dug 8 wells; rain stopped finally on the 17th September, and in the beginning of October cultivators began to dig wells in imitation of 2 of the wells sunk by me at Rawanbhata and Guriari which had proved successful. In Rawanbhata 62 such wells were made in all. I accordingly asked for more money to extend the experiment, but as the extension was only undertaken from the 16th October, and there were only 12 days left during which irrigation could be carried on with profit, and in that time the staff employed had to journey to the circles assigned, sink trial pits, select sites, dig the wells and irrigate, the extension was not so successful as it might have been, and there was practically no possibility of successful demonstration in time to secure widespread imitation. The result of the whole experiment was reported by me. Of the 2 successful wells dug in September, one Guriari irrigated 3.96 acres and the other Rawanbhata 9.94 acres, and the working of the wells made afterwards is summarized in paragraph 11 of that report which I reproduce below :---

11. As stated in the preceding paragraph 516 trial pits were made; of these 277 or 54 per cent. found water, which was renewed with sufficient rapidity to afford hope that a successful well might be made. Of these wells 230 or 83 per cent. were successful and 47 unsuccess-ful. The expenditure on 230 successful wells was Rs. 1,183-3-7, or about Rs. 5-2-4 each, including the cost of digging and irrigating. The cost of 47 unsuccessful wells was Rs. 97-15-3 or Rs. 2-1-4 each, and the cost of 239 trial pits was Rs. 45-8-1 or 3 annas each. The total cost of this part of the experiment was Rs. 1,326-10-11, and the area irrigat-ed 256.08 acres or Rs. 5-2-10¹/₂ per acre. The area irrigated per successful well was 1.11 acres.

contemplated.

in irrigating rice from temperary wells.

The number of wells made by cultivators in imitation of the example set, excluding 94 made in the villages of Rawanbhata and Guriari, was 433; the experiment was carried out in 116 villages giving an average of less than 4 private wells per village. The largest number of private wells made in any one village, excluding Rawanbhata and Guriari, was 39; and in 10 villages, 10 or more than 10 private wells were made.

The most remarkable results were met with at Kuthrel and Manohra. The Kuthrel well kept 4 chhapas (baskets swung by two men) at work and the Manohra well 4 chhapas and 8 men throwing out water by means of earthen vessels. The Kuthrel well irrigated 4.03 acres in 10 days and the Manohra well 5 acres in 8 days.

The benefit derived from the extended irrigation is shown in paragraph 15 of that report for the extension, and the results of the Guriari and Rawanbhata experiments are shown separately in paragraphs 17 and 19 :--

15. In order to test the effect of this irrigation on the rice 422 erop cuttings have been made, including 82 fields cut under my supervision to test the Guriari and Rawanbhata (original) experiment. The other cuttings were for the most part not made under superior supervision, but were made by a different Inspector to the one who was responsible for the well. 271 fields irrigated by wells were cut and 152 not irrigated were cut to effect comparison. The average outturn for the irrigated area was 781 lbs. per acre and for the unirrigated area 319 lbs. The latter average is raised by some high outturns exceeding 1,000 lbs. per acre, and it seems probable that though these fields were not irrigated, yet that they benefited by the percolation of the adjoining irrigated fields. However taking the figures as they stand the advantage per acre is 462 lbs., value at present rates 10 rupees. The cost per irrigated acre of the extended experiment was shown to be (paragraph 11 supra) Rs. 5-2-10¹/₂, and there is therefore a large balance in favour of the experiment.

17. The 25 cuttings at Guriari give the most contradictory results, some fields giving very low outturns owing to want of manure and neglect of embanking, beasi and weeding. The highest yield averaged 1,911 lbs. to the acre and 10 fields averaged over 1,200 lbs. to the acre; the district standard is 900 lbs. for all soils and positions, which would give a standard of not more than 600 lbs. for the poor bhata, dorsa II and matasi in highlying positions of this experiment. The lowest yield averaged 150 lbs. to the acre, and 7 fields averaged less than 400 lbs. to the acro. The total expenditure was Rs. 26-8-3 falling at Rs. 6-11-1 per acro irrigated. 3,544 lbs. may be taken as the benefit derived since unirrigated fields failed completely, value at corrent rates Rs. 77, and there is therefore a profit of Rs. 50-7-9 on the experiment, which would have been largely enhanced if the tenants had devoted ordinary trouble and attention to their fields.

19. The 54 fields cut at Rawanbhata do not present the same striking discrepancies as at Guriari. Only 6 fields, to which irrigation extended latest, give yields below 400 lbs. The highest average yield was 2,447 lbs. per acre, and 8 fields average 1,800 lbs. or over; of these it may be noticed that 6 are of bhata soil, of which two are classified as tangar. The average yield for 875 acres cut is 1,102 lbs. per acre. The average yield of the unirrigated fields cut is 37 lbs. per acre, and the balance in favour of irrigation is therefore 1,065 lbs. per acre, value Rs. 23 at present rates. The total cost of the well was Rs. 20-12-9 The average cost per acre irrigated is Rs. 2-1-6 and the net profit per acre Rs. 21-14-6.

It is not improbable that the success of this experiment will be considered to have been established and measures taken to extend the demonstration.

Manure.

25. "Given water and manure, rice will sprout on a stone." The manure supply is at present very inadequate; it is practically limited to ashes and other rubbish and to the droppings of cattle during the rainy months. Consequently fields are not manured every year. The importance of manure is very great; even travelling by train in this district one can see clearly defined in every field the spot where the manure has been shot prior to scattering it over the field at the first fall of rain. The rice stands up half as high again and dark and gives a much heavier yield. Cow-dung is far superior to all other manure, and gives a yield 25 per cent. better than other manures. I think the advantage is in great measure due to the improvement in the mechanical condition of the soil which helps to retain water longer in the fields of porous soil.

The silt of tanks (laddi) is also beneficial, provided that the tank has not been cleaned out for 3 or 4 years. This manure supply is, however, by no means fully utilized.

I believe also that the treatment of bhata or matasi rice fields with black soil is beneficial as helping to make the field more retentive of water, but this is very seldom done,

Good cultivators admit that it would pay them to leave much of their rice land fallow, and concentrate their manure on the remainder, but they are very tenacious of land and fear to lose their rights by leaving the land fallow; and also, their permanent labourers (sonjyas), whose employment would thereby be limited, strongly resent the idea.

Rice, sugarcane and garden crops alone are manured. The earth of anthills, which abound in this district, is very beneficial to wheat and linseed and probably to other spring crops, but very few cultivators know of this.

26. No progress has been made towards introducing transplantation, and Transplantation of rice. even the malguzar of Drug mentioned by Mr. Carey, Section 32, ad finem, has given up transplanting since 1897. Mr. Laurie, c. s., when Deputy Commissioner of Raipur, induced the malguzar of Arang to try the experiment, but although he found it remunerative, he reported that he could not get enough labour to carry on transplantation to any great extent. In his report on the experiment he works out the expenditure per acre to Rs. 4 for broadcasting and Rs. 5-5-0 for transplanting. The former figure agrees very closely with Mr. Carey's estimate of Rs. 4-3-0 per acre.

27. Of late years grass-hoppers have caused considerable damage to the Pests and discusses grass-grop and in 1902 the Commissioner of Suttaments and Agriculture of crops-grassrice crop, and in 1902 the Commissioner of Settlements and Agriculture hoppers. obtained the services of an expert to investigate this amongst other questions. The cultivators rely upon the baiga to protect them in matters such as this and give no assistance at all. It could not be ascertained where they deposit their eggs, but probably it is in the cracks of the black soil, and therefore ploughing up after rain in the slack season might prevent them emerging at the beginning of the rains; some success was obtained in the Bilaspur District by sweeping them up with nets and destroying them. Apart from this there is some evidence in favour of lighting fires at night and also of mixing a little kerosine oil in the water standing in the rice fields.

The wheat crop is damaged every year, when there is no rainfall in the third White-ants. period, by white-ants, which cut the roots clean away. The less the moisture, the greater the damage appears to be, and the best remedy seems to lie in embanking so as to retain moisture.

Embanking of spring crop land also eradicates kans, but although this Kans grass. grass appears to be making some progress, it is not as yet complained of by cultivators.

Caterpillars cause damage to spring crops whenever the weather is cloudy, Caterpillars. and in 1901 they completely destroyed all pulses throughout the district.

Linseed suffered severely from rust in 1897, and there was a little rust in Rust. wheat in 1901, after heavy and continuous rain in February. Experiments have been tried in sowing rust-resisting wheat supplied by the Commissioner of Settlements and Agriculture and in sowing seed two years old. In the year of this experiment, 1902, there was, however, no rust, and the experiment was abortive. Pissi wheat is in the opinion of cultivators better able to resist moisture and rust and kathya to withstand drought.

The cultivation of sugarcane had become almost nominal by last Sugarcane. 28.settlement, and I did not see a single acre under this crop during attestation; 21 acres shown in the statement in paragraph 7 had been cut and no new plantings had been made. Various reasons are assigned for the decrease, but the chief cause is that gur and sugar can now be imported, and that, as was the case with cotton, sugarcane was only planted so long as its products could not otherwise be obtained. Its cultivation is laborious and distasteful. The revision figures show a slight recovery.

29. Besides rice, kodon and wheat, linseed is the only crop that calls for Linseed. a separate mention. It is sown after ploughing, and is also sown broadcast amongst the rice as a second crop. It covered 8 per cent. of the gross cropped area at settlement, and at attestation bore the same proportion, but the seasons

have of late been unfavourable and the exports of this seed have been greatly reduced. Linseed oil has become very dear and has been replaced by tilli oil. At revision this crop covered only 5 per cent. of the gross cropped area.

Miscellaneous ex-

30. The cultivation of juar has been urged upon the people since I joined the district, but without much result. I had hoped that they would feed the karbi (stalk) to cattle and so improve their condition, but generally they leave the stalk standing after picking off the heads and say that the cattle will not eat it. The acroage under juar for the Raipur khalsa was—

				Acres.
In 189 8- 99	• · ·			34
1899-1900	•••			161
1900-01	•••	•••		393
1901-02	•••	•••	•••	564

The chief objection to this crop is that when planted in small areas it is destroyed by birds. However, a Muhammadan cultivator Mahomed Umer reports that he has found a variety called kauri which the birds do not touch. Cultivators round Raipur were much impressed with the success of the crop this year and are getting seed for next year's sowings. If the rainfall of the second period continues light this crop may make way. A demonstration farm was opened last year at Kumhari just outside the limits of the Tahsil for juar and cotton and the improved cultivation of til. The success of the juar crop there also made a great impression.

The probability of cotton gaining ground is not great.

Ringni juar is also being given a trial this year in the Raipur Tabsil, the Commissioner of Settlements and Agriculture having selected a suitable village.

Lakhab ita.

31. Whilst on the subject of experiments, I may as well refer briefly to the question of lakhabata, a word which cannot long remain absent from any Settlement Report on the Raipur District. Mr. Ilewitt wrote in paragraph 174 of his report : "I believe that by pressing the advantages resulting from this change of system on malguzars and ryots, a good deal might be done towards cradicating the worst evils of the present custom." We are still at the same point. All intelligent cultivators see the disadvantages, and only those support the present arrangemont who find their profit in pilfering their neighbour's crops, a practice for which this system affords especial facilities. Mr. Laurie, c. s., when Doputy Commissioner of Raipur, made a strenuous effort, and owing to his efforts a large number of chaks (groups of fields) were framed. Settlement work in this district is very heavy owing to the millions of khasra entries involved; this work has been rendered still heavier by the many changes due to the famines, and I have not felt disposed to lay any extra burden on my Inspectors, who, as it is, have generally worked by night as well as But what Mr. Laurie could do, another can do or at any rate attempt, by day. and I believe that the time is now ripe for the attempt, both from Mr. Laurie's success and my own experience of the people. Government should, however, be prepared to make some sacrifice to help towards this desirable object, and if a malguzar or cultivator consents to give good fields for bad or large fields for small in order to frame groups, the Deputy Commissioner and his assistants should be empowered to give him an immediate reduction of rent, if the area given in exchange by him exceeds say 10 acres. The sacrifice would be small, as rents are very low, but it would be a valuable inducement. If the experiment is taken up, select Hindu villages at the outset, and let the exchanges be recorded in writing and signed by a panchayat of respectable cultivators.

32. The cattle of the district are very small, but sturdy and well-shaped. They only get a little grain at ploughing times, and straw and bhusa at other times. A pair that will work for 8 or 9 years is said to cost from Rs. 25 to Rs. 30, and a pair of buffalces that will work for 6 or 7 years Rs. 40 to Rs. 50 (buffalces succumb more easily to disease and therefore a shorter

Cattle.

term is usually estimated for them). Mr. Hewitt (in paragraphs 175 and 176) says: "Bullocks sell from Rs. 24 to Rs. 40 a pair—buffaloes fetch from Rs. 80 to Rs. 90 a pair." Mr. Carey criticizes this estimate, and certainly the middle generation say that prices have risen, and that a pair which cost Rs. 25, 25 years ago, would now cost Rs. 30; but those who remember Mr. Hewitt's settlement say that cattle were costly then, and it may well have been so. It has already been mentioned that he says that cultivation had trebled within the 10 years prior to the time at which he was writing; there would therefore have sprung up a great demand for cattle which could not at once be met, and prices having risen twelvefold, cultivators would have had the wherewithal to obtain what they wanted. No doubt breeding and increase in supply followed quickly and the prices foll rapidly, but I should hesitate to set aside Mr. Hewitt's figures. Prices are at present said to be above the normal owing to losses caused by Chamars during the famines, and not below the normal as one would have expected.

A large number of cattle are bred in the villages; for this purpose two of the best looking bulls are set aside by the malguzar or well-to-do tenants. These animals are called *golar* in the case of bulls and *bijar* in the case of buffaloes. They are permitted to roam about at will and trespass amongst the crops.

In two villages in this district there are herds of wild cattle which do considerable damage in several villages. They are the descendants of cattle set free at death by wealthy men, but I do not think this practice will find much favour in future.

I am told that a pair of bullocks can plough an acre of light soil or two-thirds of an acre of black soil in a day. Buffaloes are slower, but can of course do heavier work.

The diseases to which cattle are most liable in this district are *chaye*, the chief symptom of which is excessive purging (in some parts this name is discreetly used for Chamar poisoning), and *saunai*, the chief symptom of which is a swollen throat. From these two diseases 90 per cent. of the cattle affected are said to die. From *mata* (cattle-pox) 50 per cent. and from *kurha* (foot and mouth disease) only 25 per cent. A poor tenant will labour for four days in exchange for the use of a plough and pair of bullocks for one day.

33. The number of plough-cattle is less by 11 per cent. than at the summary settlement, and many of the poorer tenants have insufficient cattle. There are, however, signs of recovery in the Nankatti Group-1898, 9,126; 1901, 9,455. Some of the worst villages of the Nankatti group have since attestation passed into the hands of wealthy Kurmis who effect rapid improvement. One such village which had 47 per cent. fallow at attestation had only 7 per cent. fallow at revision.

	Name of	group.			Summary settlement.	Revision.	Remarks.
Dhamda		•••		•••	15	18	
Nankatti				•••	14	17	
Drug	***				18	14	
Bhilai	•••	•••			18	15	
Patan	•••			•••	12	12	
Ranchirai	•••				11	12	
Arjundah		***		•••	12	15]	
Bhandera	•••	•••			14	17	
Pinkapar		•••		•••	18	16	
			Total	•••	18	15	

34. The number of acres per pair of cattle at last settlement and at revision was as follows :---

These figures give a very fair clue to the relative condition of the different groups now. At settlement, however, one would have expected to find fewer acres to the pair in the Dhamda group, with its fine kanhar wheat land, and in the good black soil tracts of Bhandera and Pinkapar, and it is curious that Nankatti with its light soil and spreads of bhata should have as few acres to the pair as the Bhandera group.

35. The soils of the Tahsil are-

- 1. Kanhar
- 2. Ghurri-kanhar.
- 3. Dorsa
- 4 Matasi.
- 5. Bhata.
- 6. Patpar-kachhar.
- 7. Pal-kachhar.

1 and 2 Kanhar.-There are many local names and distinctions, but kanhar and ghurri are universally understood and used. The soil is the same in both cases, but in ghurri there are many pebbles and limestones. The appearance of kanhar is quite distinct from that of dorsa, although of course they shado into each other. Kanhar is black and deep with very wide deep cracks; when dug with a pick-axe large clods are obtained and they break with flat faces. The weed called kutwa is found only in kanhar and never in dorsa.

3 Dorsa.-(Do-rasa or Do-matti) is the mixture of the two soils kanhar and matasi. Inferior dorsa is a mixture of bhata and kanhar. The gurarya weed is distinctive of this soil. It is not so deep as kanhar; the clods are smaller and more irregular and it is of a lighter colour.

4 Matasi-is a yellowish soil of no great depth. Dudhya-matasi is distinguished from all other matasi, and gives very heavy yields of rice. It is so called because when the rain falls, it takes a milky appearance. There are many names for the inferior kinds of matasi.

5 Bhata-for non-rice land is on the very margin of cultivation. It is a hard shallow red soil and requires regular fallows. Chapla-bhata is softer and of more depth, but also requires fallows.

6 Patpar-kachhar-is highlying land on the banks of rivers ruined by deposits of saud. Minor crops are grown in it with resting fallows. When sand is deposited in smaller quantities it does not do much damage, and a small admixture is even said to be beneficial. Only that soil which has been completely impregnated with sand is called patpar-kachhar.

7 Pal-kachhar—occurs in small patches at the bends of rivers. It is very rich, being kanhar enriched by deposits of silt. Wheat grown in this soil gives a magnificent yield and has a stalk similar to those used for sucking iced drinks.

There are many qualities of the three principal soils—kanhar, dorsa and matasi, and the people recognize and demonstrate this by their extremely minute and careful sub-division, but by reason of this safeguard they often do not apply any name to the distinctions which they make. Every village is split up into a great number of khars, and it is true that every khar has a distinctive name, but very often that name has nothing to do with the quality of the soil.

Positions recognized 36. The positions recognized by the people in rice land are gabhar for by the peoplelowlying level fields and tangar for highlying land. Land on a slope is called gas-pakhari. The gasa adjoins the bank which holds up the water and the pakhar is the higher part of the field from which the water drains into the gasa. A few cultivators know the word—warkaha—for sloping land, and this

Soils.

word is probably closely connected with bharka and bharkila, which signify the channels made in unembanked land by the rush of water. Highlying level land is called "māran." Bahara signifies level lowlying land which gets water from a great distance. All the baharas that I have seen have been the passages by which the river water travels when it overflows its banks. Nar is used for raviny land.

Rasanha means that land to which the village water flows.

The terms for irrigation have already been described.

37. Practically the only position terms used for non-rice land are bhar-Non-rice land kila and bandhya. Bharkila signifies the channel made by the rush of water in lowlying black soil land. Tangar is used for highlying non-rice land as well as for rice land.

em-

38. In the classification employed ghurri-kanhar has not been used, but Classification dorsa was divided into two classes. The other soil names employed were as ^{ployed} stated in paragraph 35 supra. The positions employed for rice land were bahara, gabhar, dadha and tangar. Gaurasa has been used for both rice and non-rice land for the fields near the village site which receive the village water or the offices of the villagers. Only one class of irrigation has been used for rice land. In black soil tikra has been used to mean that the land does not grow wheat. Bharkila was used in its limited local application, *i.e.*, not for the whole area which suffers from scouring, but merely for the channel. Bari and bari-abpashi have been used for garden land.

39. It seems to me that a Settlement Officer, whose previous training has generally been limited to three weeks or a month with a Settlement Officer in another district, is practically not competent till well advanced in his settlement to form any opinion as to the most appropriate classification for his own district, and that if the classification of soils is to be carried out pari passu with attestation, he should be supplied with definite instructions as to the classification to be employed, and not expected or even permitted to vary those instructions. If the classification contains terms not in use by the people, a clear definition of such terms should be given. A classification which employs terms not in use by the people is a very risky experiment especially in this district, and can only be safely worked by an expert in soils and agriculture. The guides to soil classification are (1) the valuation of the people, (2) the comparison of rents paid for different soils, (3) crop experiments. For a term not in use by the people, they can have no valuation. If, as here, there are mixed holdings and no soil rents the second guide becomes inoperative. Even if there were soil rents, they would not sorve as a guide where the rental is not a full one. Crop experiments alone are left, and even they are useless. Difficult to reconcile at any time, as I think most Settlement Officers will certify, with a new and arbitrary distinction they are exposed to this further uncertainty that the classification may be wrong. If I find dorsa II giving better yields than kanhar, am I to raise the valuation above that of kanhar or am I to alter my classificacation. If I find dadha yielding worse than tangar or better than gabhar, am I to alter my classification, or am I to lower or raise my dadha factors.

Two terms were included in the present classification which are not recognized by the people—the division of dorsa into two classes and the dadha position in rice land. They have caused much difficulty and should be omitted in future.

40. Black soil has been classed as gohari and tikra. The second term merely meaning that the land does not grow wheat. This, however, seems unnecessary for kanhar and dorsa I. These soils can always grow wheat, and if wheat is not grown, the Settlement Officer can note the cause in his C Note and so save his table of factors. In this district where there are many thousands of khasra entries to every village, the saving of every factor, that is to say, of every avoidable soil or position in the classification that cannot be shown to be absolutely essential, is of the utmost importance. With the

introduction of dorsa II and separate factors for gaurasa and irrigation for the different positions, there were 86 separate factors any of which may also fall into new fallow or into bari (garden land). New fallow and bari were marked by putting letters against the entries, but still, during the Drug office season, 172 columns had to be provided in the chitha for compiling the totals of soils with other qualifications in each holding. Villages of 5,000 numbers and upwards to be spread amongst 172 columns by contractors, working during the rains with insufficient accommodation and a bad light, was an experience that makes one very loath to accept any increase in the factors and anxious to do away with all that are not indispensable. In my Drug Preliminary Report I recommended the abolition of 34 factors which was accepted, and improved on by the elimination of 6 more. Amongst others the irrigated factors for the gabhar position were eliminated. I recommended this solely on the grounds of necessity, for although the cultivators denied it then, irrigation is certainly of value in the gabhar position, and even in the bahara position in years of failure, such as the district has recently experienced. The settlement scale proceeds chiefly on the basis of security and does not conform to local valuation which attaches a higher valuation to the lighter and more precarious soils than that adopted. To be consistent, therefore, irrigation cannot be ignored.

Classes recommended.

41. I believe that in every division of these provinces and even between districts of the same division, the names of the soils differ and the terms used for other distinctions. This practice, which must be very perplexing to any one but the Commissioner of Settlements, seems to have been kept up chiefly because the only safeguard of an amateur classification is the employment of terms in common use by the people. I do not understand, however, why, for office purposes, soils and positions should not be thrown into classes. That is to say, when in the table of factors sanctioned for Drug :—

Kanhar-dadha Dorsa I, Dadha-gaurasa Matasi Dadha-abpashi Dorsa II, Dadha-abpashi all bear the factor 16, Dorsa I, ordinary Matasi Bari-abpashi

why should not all these be shown for the purposes of the chitha khationi and ryotwari abstracts as one class. The Settlement Officer would still consider his soils and positions separately and propose a separate factor for each, but he could then, without fear for his office work, extend his classification to meet all the nomenclature of the district. The effect of an admixture of sand or limestone in black soil, and of a somewhat obscure defect on account of which black soil is called *Garanha*, all require careful examination; but so long as *kanhar-kachhar* (sandy), *ghurri-kanhar* and *kanhar-garanha* are classed down to dorsa, crop experiments will throw no light on these points. The effects of the different methods of irrigation also should be dealt with.

So long as the effects of the lakhabata system continue, the very simplest classification is a sufficient safeguard for this district. Or if there were no lakhabata, rents are so low that there could be no risk in a simple classification. But if the lakhabata distribution ever becomes a thing of the past, and the Settlement Officer of the future is to be expected to enhance rents, which may have approached towards the limits of a fair demand, he will require a much fuller classification and unlimited evidence in the shape of crop experiments to assist him to a true valuation. The sooner, therefore, that the classification is extended, so that the khasra shows every field by its proper description, the sooner that evidence will begin to accumulate. If the effects of the lakhabata disappear, khasra entries and the office work of settlement will be reduced, but if the classification is not extended till then, it may be too late to accumulate sufficient evidence in the shape of crop experiments. If soils can be put into classes for office work, I should propose a very full description, but before doing so I should like to have an opportunity for doing that, for which I have never yet found time, *viz.*, tracing out the classification by lakhabata thoroughly. For this it would be necessary to mark out the holdings of absolute-occupancy tenants with different coloured flags on the maps, and having traced out the different lakhas to examine one thoroughly in each village and ascertain, so far as the cultivators could explain, their reasons for differentiating between different khars. It would take two or three days to examine a single village thoroughly, and the examination of one or even ten might lead to no result, but I think such an examination of 50 or 60 villages would probably throw useful light on the question of the most suitable classification.

42. One thousand seven hundred and eighty crop experiments have been and experiments. The experiments are the completeness of the failure and again in 1901. The complete ruin of all pulses by rain and caterpillars in that year was very unfortunate, as it deprived us whilst in the Dhamtari Tahsil of any opportunity of making useful experiments in the utera or second crop. Recent seasons have, by reason of failure of the late rain, been very unfavourable to this form of cropping, and there are therefore very few experiments. The experiments referred to, of the years 1899-1900 and 1901, have not been included in the figures given below, as they would have vitiated results to a serious extent.

The table below gives the number of experiments made in each crop, without regard to soil, and the average yield (actual not corrected by estimate). The crops have been threshed and weighed as soon as cut, and therefore a deduction must be made for dryage, especially in the case of rice, but on the other hand it must be remembered that recent years have not been very favourable. In 1897-98 and 1900-1901, rice seed was sown very sparsely, and manure and weeding and repair of embankments were neglected owing to famine conditions prior to and during the rains. 1898-99 was a very fair year, 1899-1900 has been referred to above, and in 1901-1902 the later rain was very capricious and some very poor results are included. For wheat also the seasons have not been favourable, and I have seen nothing to approach the crop which I saw here, when on famine duty in the Drug Tahsil in 1897. In 1898, the wheat crop was fair in the north of the tahsil but poor in the south. In 1899 the crop was generally poor and greatly damaged by whiteants. In 1900 there was no yield. In 1901 the crop suffered from excessive rain in February, and again in 1902 suffered from the ravages of white-ants, owing to early cessation of rain and complete absence of the rainfall of the third poriod :---

	Name	of Crop.	of of experiments.	Resulting average.	
Bice Wheat Linsced (Bota) Linsced (Utora) Kodo Urid (Utora) Gram Masci Batra Batra Batra (Utora) Lakhri Lakhri (Utora) Gram (after rice) Bahar Kutki Sugarcane Bice (transplanted)	···· ··· ··· ··· ··· ··· ··· ··· ··· ·			 1,278 155 69 49 133 24 31 6 6 4 1 1 5 2 7 7 1	1,046 583 195 98 525 231 554 578 330 462 480 218 507 880 464 2.240 1,545

43. I have also prepared two tables showing the results by soils and by positions, but any attempt to discuss these results would run to much greater

length than the limits of this report permit, and the point has therefore been dealt with in a separate memorandum. The experiments available for the Drug Tahsil were discussed in the Drug Preliminary Report.

Outsurn of crops.

44. The accepted standards for the Raipur District are for-

			105.		
Whea t	•••			600	
Rice	•••	•••	•••	900	(paddy)
Gram		•••		450	
Kodon	***	•••	•••	550	
Linseed	•••	•••		250	
Til		•••	•••	150	

With more favourable seasons, I should have recommended raising the standard for paddy. This would have been necessary in order to arrive at a true estimate of the usual balance for export in the district, but allowing for dryage and the number of experiments in favoured positions being necessarily out of all proportion to the area under those positions, the crop experiments do not justify any alteration at present. I have made a good deal of enquiry as to the amount of seed sown per acre in the field. Any cultivator will tell you how many kathas he sows in a particular field, and by selecting large fields and checking the measurement of the katha he uses, and then comparing with the area of the field, a sufficiently exact result can be arrived at. I think that Mr. Carey has gone too much below Mr. Hewitt's estimate and that 15 to 16 kathas * or 100 lbs. is nearer the true average. Cultivators of any respectability and pretence to truthfulness readily admit a ten-fold yield, and even during this recent series of inferior years I have frequently heard 12 to 15 fold admitted, not for particular fields but for large holdings of mixed soils. If cultivation were uniformly careful, 12 fold or 1,200 lbs. could be safely adopted, but allowing for neglect of embanking, manuring and weeding, 1 still think that at a normal time 1,000 lbs. would be a more appropriate standard.

The practice as regards to wheat varies considerably. Sometimes it is sown broadcast, but so rarely that I do not propose to discuss this method; when drilled in (local term unhari), if the tilth is coarse, only two-thirds of the rice measure, *i. e.*, 10 kathas or about 90 lbs. is sown; if, however, the tilth is good, even more than the measure of rice is sown, that is 135 lbs. and upwards. An outturn of 7 to 8 fold is admitted by some or, as put locally, a gara from $2\frac{1}{2}$ khandis in land newly broken and a gara from 3 khandis in land long under cultivation (one gara equal 20 khandis), but it is far more commonly stated that 4 to 5 fold is a normal yield, and more than that is only had in a bumper year. I think that on an average 120 lbs. falls to the acre, and that the present standard is suitable. Practically the whole of the wheat crop is available for export. Linseed and kodon may stand; the seasons have been unfavourable. Gram might well be raised to 550.

							PE	RCENI	AGE (OF S	OILS	A'T			
	Name of Group.			SUI	IMAR:	y Sai	TLEME	NT.				AT PRE	BENT.		
Serial No.			Kanhar.	Dorsa.	Matasi.	Bhata.	Pal-kach- har.	Patuar- kachbar	Kanhar.	Dorss 1.	Dorsa II.	Matasi.	Blata.	Pal- kachhar.	Patpar-
1 2 8 4 5 6 7 8 9	Dhamda Naukatti Drug Bhilai Patan Banchirai Arjunda Pinkapar Bhandera	•••• •••• •••• •••• ••••	18 15 22 8 26 9 17 21 34	59 46 50 47 49 52 53 61 51	13 24 22 84 22 36 23 12 13	10 15 6 16 3 9 7 6 2	· · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	2 13 22 6 38 34 32 21 30	44 34 36 31 28 32 37 39 47	17 25 21 22 13 6 8 24 12	9 18 16 27 17 25 20 10 7	10 10 4 14 2 3 4 6 8	· · · · · · · · · · · · · · · ·	 I
	Total	•••	18	52	22	8			23	97	17	16	7		

Distribution of soils 45. The next statement gives the distribution of soils by groups at the by groups. summary settlement and at present :---

' The kathas referred to hold 4 seers and 9 chhittaks of rice or 8 seers and 4 chhittaks of paddy.

Over the Tahsil as a whole the percentage classed as bhata has fallen from 8 to 7. Bhata soil when embanked for rice and subjected to the action of water and manure loses the appearance of bhata and is called matasi by the people. Hence the slight reduction. Although ghurri-kanhar has been classed as dorsa I, kanhar has increased from 18 to 23 per cent. Soil classers unless kept up to the mark seek safety in avoiding extremes and the kanhar area was much underclassed at the summary settlement. Many cultivators call all soil, other than bhata, which does not yield a double crop, matasi; but with the introduction of dorsa II, where such matasi was found to contain an admixture of black soil, it was changed to dorsa II.

Bhilai has the lightest soil, followed closely by Nankatti, which has, however, some black soil riverain villages. Bhandera and Pinkapar with 89 and 84 per cent. are almost entirely black. The kanhar area of the Dhamda group is still much underclassed, and in comparison therewith Patan and Ranchirai are overclassed.

About 11,000 acres of irrigated land escaped a separate factor because no irrigated factor was proposed for bahara and gabhar. In the same way a considerable portion of the gaurasa area was let off, including some very valuable rasanha. As a large percentage of the irrigated and rasanha land is in the malguzar's possession, they have benefited considerably by this concession.

The gaurasa area in non-rice land was small; in the wheat land no factor was proposed, and this class might also have been very well dispensed with in the tikra. Bari dry and gaurasa were classed together with one factor.

Section IV.-Trade and Prices.

46. The range of prices of wheat, rice and linseed are set out below from Price 1861—1902. Figures for linseed are only available from 1867. Separate quotations are given for best rice and common rice from 1887. These figures are for Raipur town :---

Year.	Wheat.	Rice, best kind.	Rice, common.	Linseed.
1861	48.00		33.00	•••••
1862	88.00	सत्यमंत जयत	70.00	
1863	61.00		56.00	
1864	32.00		\$1.00	
1865	22.00		17.00	
1866	20.00			
1867	36.00		24.00	10.0
1868	36.00		26.00	15.2
1869	15.00		12:00	13.8
1870	23.00		28.00	21.3
1871	48.15		27.17	22.0
1872	41.83		37.91	20.9
1873	42.27		87.75	22.6
1874	41.06		33.97	27.0
1875	46.54	*** 184	35.04	80.0
1876	58.74	*** ***	80.49	25.9
1877	48 59	••••••	81.66	14.7
1878		••••	19.71	21-8
1879	19.48		21.07	21.8
	19.88	******	24.35	20.0
1880	25.54	*****	37.94	200
1881	89.08	••••••		
1882	81.53		40·55 32·04	20 0
1888	23.46	*** ***		17.7
1884	29-25	••••	23.65	20.0
1885	84.63	*** • • •	23.86	15.0
1886	28.00		23.45	12.4
1887	23.44	13.98	18.04	13-5
1888 -	22 46	18.52	18.07	12.5
1889	20.74	12 51	16.40	11-9
1890	22.90	12.75	19-08	11.9
1891	18:41	16-18	21.32	11.8
1893	15.12	15-00	17.85	101
1898	20-98	14.83	18.91	106
1894	31 ·97	16-22	19-34	100
1895	18.72	15.26	19-18	8.2
1896	14.83	11.91	14.89	10-8
1897	8.89	7.50	9-14	10.4
1898	18.96	10.71	16.64	12.9
1899	13.96	19.50	17.33	10-8
1900	9.78	9-25	11.10	12.3
1901	12-08	9.54	11.88	7.4
1903	18.96	11.88	12.83	7.1

Mr. Hewitt bases all his calculations for rice and wheat on a rate of one rupee for one maund of 40 seers of cleaned produce and for linseed at 20 seers per rupee. At paragraphs 220 and 221 discussing the possibility of expansion of exports he makes the following remarks :---

"220. The trade, however, as carried on now, has probably reached a limit at which it Expenses of carriage a hindrance to further expansion of trade. "20. The trade, however, as carried on now, has probably reached a limit at which it will be stationary or nearly so for many years, as the expenses of export are so great as to require a very high price at the selling market to compensate the dealer for his risk even if he purchase at extraordinarily low rates. Thus at present the average rates of

extraordinarily low rates. Thus at present the average rates of carriage to Nagpur or Jubbulpore are 15 rupees per cart or 3 rupees per bullock; each cart will carry about 16 maunds and each bullock about 3 maunds. Thus taking the cart-load of 16 maunds the cost of load and expenses will be as follows:--

					•		Rs.
Cost of load of	wheat of	r rice	•••	•••	•••		16
Cart-hire	•••	•••	•••	****	•••	•••	15
Contingencies	•••	•••	•••	•••	•••	•••	2
					Total	••••	33
					2000		

So that to realize a profit of 10 per cent. the grain must be sold at about 17 seers for the rupee, and even if by giving advances, or owing to a large harvest, he gets the grain at the very low price of 1 rupee for 2 maunds of clean rice (the lowest average price during the last five years), be must still sell at not much less than 24 seers per rupee to realize his profit, and the same calculation will hold good with bullocks, while the demand for carts and bullocks, caused by any very great extension of the traffic, would so raise the rates of rice as to very soon absorb any extra profit which might be obtainable from a great rise of prices in the exterior markets."

"221. But though the limits of profitable trade for dealers have been nearly reached, the same cannot be said of that carried on by the ryots, and those who have carts and bullocks of their own and leisure time to spare can afford to sell their grain at much have a to then professional dealers have been nearly reached, the same

sell their grain at much lower rates than professional dealers, and it is therefore in the trade carried on by them that any great increase in the exports is to be looked for. Already many ryots are their own exporters, and as the people advance in wealth, the number will yearly increase probably."

It was presumably on the basis of 40 seers to the rupee that he remarked that prices had risen twelve-fold in fifteen years — that is since 1854.

 $40 \times 12 = 480$ Add $\frac{1}{2}$ to convert from husked to unhusked ... 240

Add 10 per cent. for cost of husking720 seers of paddy.Divide by \$\$ to convert to kathas792... = 243 kathas, or roughly 12 khandis
per rupee.

Allowing for the fact that village katha of those days, though variable, generally did not hold more than four seers of rice, and that no allowance has been made for carting into Raipur from the interior, it will be apparent that if Mr. Hewitt is quite correct in his statement about the twelve-fold increase, paddy must have been solling even cheaper than 12 khandis per rupee in the interior. Further, at paragraph 188, Mr. Hewitt puts the wages of husking at one-fifth or 20 per cent., and the loss in husking one-half. But in this I think he was confusing loss in weight with loss in measure. One khandi unhusked gives 10 kathas husked, but the respective weights are as 3 to 2, since the measure of rice weighs half as much again as the same measure of paddy.

By some such confusion of measure and weight and by comparing prices in the interior at the earlier stage with prices at Raipur at the time he was writing, and by not allowing for the smaller size of the village measure, he may have been misled into saying that prices had risen twelve-fold. The highest rate that has ever been mentioned to me for the years preceding Mr. Hewitt's settlement was 9 khandis of dhan per rupee, measured in the katha of 4 seers rice capacity; this would be roughly 8 khandis per rupee. The rate for dhan prior to the commencement of the bad seasons was 2 rupees per khandi, and therefore on Mr. Hewitt's statement the price of the principal staple of this district has risen twenty-four-fold, and on the lower estimate has not risen less than sixteen-fold since the years immediately preceding Mr. Hewitt's settlement.

47. In considering the effect of variations in price on the condition of the tenantry, one must generally judge by the lowest rates prevailing at the earlier periods, unless one has detailed information as to the character of the seasons. Writing now I discard from consideration the high prices prevailing from 1896 onwards, because I am fully acquainted with the character of the seasons, but I cannot judge with certainty the figures of the decade 1860-70. I know that the rainfall was short from 1867-69 and that there was a severe famine in 1869, and as the settlement was in progress from 1852 and Mr. Hewitt joined the district in 1864, it might be assumed that he would have mentioned any failure within his knowledge; but of this I cannot be quite certain, because in those days one or even two successive crop failures produced very little distress, especially if only partial. In those days, years such as 1896-97 and the present year 1902-03 might woll have passed by unnoticed, and even the year 1900 would then have been tided over with but little mortality, if preceded and followed by good seasons. The famine of 1809 was the result of two years and in the Drug Tahsil of three years with a rainfall less than that of 1900.

The prices of 1864—66 then suggest severe crop failure, and, if so, the period 1864—69 must have been infinitely worse than the present series of bad years. The question can best be tested by the method suggested by Mr. Hewitt's paragraph 220, and I therefore compare the prices prevailing in Nagpur for wheat and rice with those at Raipur for the years for which export figures are available :—

				RICE.	_		WILFAT.	
	Ycar.	ļ	RATES IN	GERBS PER E	UPER AT	RATES 1	N SEBRS PER B	UPBE AT
· •			Raipur.	Nagpur.	Export in maunds.	Raipur.	Nagpur.	Export iu maunds.
1863-64			56		279,058	61		515,492
1864-65	•••]	31		140,499	32		412,737
1865-6 6	•••]	17	20 2	74,008	22	17	1 24 ,928
1866-67	•••		•••		108,855	20		210,462
1867-65]	24) (213,759	36	JU	308,819

The Nagpur Settlement Report does not unfortunately give separate figures year by year, but only one rate for the years 1863--70. The general average for the years 1863-68 should, however, be lower than the rates shown, because the famine of 1868-69 pushed the rates up for that year. Prices both before and after the period 1863-70 at Nagpur were lower:--

	AVERAGN PRICE IN BUPBES PER KHANDI OF 200 SEBBA AT NAGPUB.								
	P	eriod.		Rice.	Wheat.				
				Rs. a. p.	Bs. s. p.				
841-62		•••		214 0	5 3 0				
868 70		•••	•••	10 0 0	11 8 0				
1871 - 75		•••		880	8 12 0				

There is unfortunately no figure for rice for Raipur in 1866-67.

Employing the general Nagpur rates of 20 seers per rupee for rice and 17 seers per rupee for wheat, a cart-load (as per paragraph 220 quoted above) of 16 maunds of rice would fetch Rs. 32 and of wheat Rs. 37-10-0.

Yuars.		Rice	Add Rs. 17 for carriage as per paragraph 220.	Year.	Wheat.	Add Rs. 17 for carriage as per paragraph 220.		
			Rs. s. p.	Rs. a. p.		К в. в . р.	Rs. s. p.	
1 86 3-64	•••		11 7 0	28 7 0	1863-64	10 8 0	27 8 0	
1864-65	***		20 10 0	37 10 0	1864-65	20 0 0	37 0 0	
1865-66	•••	•••	37 10 0	54 10 0	1865-66	29 0 0	46 0 0	
1866-67	•••	•••		}	1266-67	32 0 0	49 0 0	
1 867 -68	•••		26 11 O	43 11 0	1867-68	17 18 0	34 13 0	

The cost of this cart-load would have been at Raipur rates :--

From these figures it is clear that profitable export of rice would not have been possible during any of these years, except the first, on the terms mentioned by Mr. Hewitt; that there would have been only a profit of 10 annas in the cart-load of wheat in 1864-65 and Rs. 2-13-0 in 1867-68, whilst in 1865-66 and 1866-67 export would only have been carried on at a heavy loss. In 1865-66 rice was more expensive at Raipur than at Nagpur. The figures of export at Mr. Hewitt's disposal were those of the Eastern Circle, and his distribution or rather assignment of a certain fraction to the Raipur District is admittedly a mere estimate; but the Bilaspur prices agree fairly closely with those of Raipur.

It is curious that in neither district is there any quotation for rice in 1866. The exports up to 1865-66 can be explained on the assumption that dealers had made heavy purchases while prices were still low, and that though quotations are given in Raipur and Bilaspur, there was in fact no local demand; or, secondly, that carts came from Nagpur not knowing of the rise in prices and took back some load rather than none, even though the profit could nothing like pay their expenses. The recovery of rice in 1866-67 and 1867-68 cannot be explained on either of these suppositions, and the explanation must be either that rice was obtainable at rates cheaper than those quoted, or that the grain was carted in by tenants in their own carts. Extensive carting by tenants is a regular feature of famine, vide the exports of til from Chhattisgarh in 1900 and the present year. The figures show great depression from 1864-67. It may safely be taken that the rates for 1864-70 indicate a series of years comparable with and probably worse than the present series of 1896-1903, and that the high prices were due to bad seasons and not to an increased demand for export.

48. In bad seasons the tenant has nothing for sale; he is fortunate if he has enough for food and seed. It is only in good and bumper seasons that he has much surplus, and we must therefore look to rates that are free from suspicion of failure for comparison. In 1862 wheat was selling at 83 seers per rupee and rice at 70.00 seers per rupee; in Bilaspur, where prices generally ruled a little easier than in Raipur, the following quotations are given for earlier years:-

						Rı	OE.				WHEAT.											
Period	•		Ma	xi.		Mi			V €1	nge.	Maxi- mum.	Mini- mam.	Average.		Ma: mu:			Min			7671	ege,
·		B	——). 1	. p.			. p.	R	o. a	· p.	۲ <u>۱</u>			B		. p.	R	. I	. p.	Be.		
1849—58		0	5	4	0	6	0	0	4	8				0	8	- 0	0	8	0	0	8	
185961	•••	0	ß	4	0	5	4	0	6	0	The sam	e rates s	s for rice	0	10	8	0	8	0	0	9	6
1863-67		1	5	0	0	6	4	0	10	8	are give	1. Thie	is doubtful]1	5	4	0	10		11	1	6

Per maund of 40 seers.

Apparently rice was not cheaper than 120 to 160 seers per rupee between 1849 and 1861 at the head-quarters of Bilaspur. I have already stated that in the interior of the Drug Tahsil, rice sold for 9 local khandis per rupee=320 seers per rupee within living memory.

I have included the linseed figures from Bilaspur, because the figures are not available for Raipur. The minimum rate up to 1861 was 80 seers per rupee and the maximum 60 seers. Between 1862 and 1867 the minimum was 60 seers and the maximum 30 seers. Mr. Hewitt took 20 seers per rupee for calculating the value of the Raipur yield. The year 1876 was a bumper year for wheat in both districts. In Bilaspur wheat sold at 84 seers and in Raipur at 54 seers. So late as 1882, the year before the railway was opened to Raj-Nandgaon, rice sold for 40 seers in Raipur and in 1881 wheat sold for 63 seers. Linseed sold for 30 seers in 1875 and for 23 seers in 1881. In 1878 and 1879 there must have been some failure and wheat sold at 19 to 20 seers and rice at 20 to 21 seers. The figures up to 1883 show that a tenant, when he had much surplus to dispose of, would have been fortunate to get .Re. 1 for 40 seers of rice, 50 seers of wheat or 25 seers of linseed.

49. With the opening of the railway to Nandgaon rice jumped to 24 seers, and remained at that figure for three years, until the heavy reserves began to be depleted. The fourth year, 1887, coincided with a partial failure of the rice crop in the Simga Tahsil, which continued for three years. The price rose to 18 and then to $16\frac{1}{2}$ seers. This rise was partly due to depletion of stocks and partly to failure, but in 1890—95 rice found its level at 20 seers, and is not, I think, likely to fall below that level in future. On the other hand, judging by the year 1900, it is never likely to rise above 11 seers, at which stage outside competition enters. The rate will probably vary round 18 to 19 seers, except in abnormal seasons, for some time to come, unless an increased yield due to greater industry and enterprise coupled with favourable seasons depresses the rate. Men having large dealings say that 4 to 3 fairly represents the value of good and common kinds of rice, but that in bad seasons the rates come closer together, say 7 to 6. Both statements find some support in the figures quoted in paragraph 46.

After the three years immediately following the opening of the railway to Nandgaon, when reserves kept down the rate, wheat found its level at 22 to 23 seers, and I think that with the return of good seasons, when the seed reserves are replenished, it will not soll much dearer than 20 seers to the rupee.

The reserves of linseed being much smaller were more quickly drained off, and it found its level in 1886 at 12 to 13 seers per rupee. The rates of 1901 and 1902 are abnormally high owing to repeated failure, but will fall rapidly with good seasons.

Khan Bahadur Aulad Hussain's settlement coincided with the opening years of the railway, and the rates quoted at the end of paragraph 48 may be taken as standards, but he did not deal with rents, beyond a triffing enhancement of the absolute-occupancy class, and prices at that period are not material.

50. For the interior of the tahsil accounts are available from 1861 at Patan, from 1876 at Arjunda, with occasional entries at Drug since 1871. At Deokar, which is just outside the limits of the tahsil to the north, accounts are available since 1868. These have been carefully examined, but the figures are very conflicting and quite worthless.

51. Mr. Hewitt valued his exports at 40 seers for wheat and rice and 20 seers for linseed, but his conception of prices would only be material if he had assessed up to the full limit justified by the rise in prices. With a rise of twelvefold or at least eight-fold, it was impossible for him to do this. Mr. Chisholm, on the other hand, took 80 seers for wheat and rice as his basis and said that he did not think the existing rate of 40 seers could be maintained. In this he was quite correct, wheat dropped to 84 seers on one occasion in Bilaspur and to

54 in Raipur, which would indicate 60 seers and upwards in the interior. If Mr. Chisholm's basis of 80 seers is taken, then prices at Mr. Hewitt's time had risen four-fold and perhaps six-fold. Although he raised the assessment boldly, and rents were much enhanced, yet not half the full rise in prices was absorbed. In Bilaspur, Mr. Chisholm remarked that if prices should be maintained at 40 seers, his rate of 10 annas per acre would be ridiculously low. The Drug Tahsil all-round rate was 9 annas and 8 pies and before attestation 9 annas and 11 pies. The standards I have taken in paragraph 49 are rice 20 seers, wheat 22 seers, linseed 13 seers; and although wealthy men may have been able to take advantage of the high rates prevailing at the time of Mr. Hewitt's settlement, small tenants certainly could not, and there is but little doubt that the price now obtainable by them, when they have surplus produce to dispose of, has quadrupled for rice and wheat and more than doubled for linseed. Prices have at least doubled since the opening of the railway to Nandgaon, and the tenant has a certain market, where as formerly in good years he often could not even get the low prices prevailing, because of the lack of demand.

Barar and trade centre.

52. There is nothing in the Drug Tahsil that can be dignified by the name of a town. The following villages are important :-Drug (population 3,935), Dhamda (2,652), Patan (1,469), Arjunda (1,152), Bhilai (1,056) and Nankatti (1,190). Drug and Dhamda used to be the head-quarters of parganas, and have traces of fortifications and moats for defence. Banbarodh has points of interest for the antiquarian. The only bazars that call for mention in this tahsil, apart from those already mentioned, are Utai and Ranitalao. These are important cattle-markets-Barbapur, Nawatalao, Nagpura, Ranitarai and Pinkapar. A certain amount of cattle-breeding and import of young animals is carried on at Arjunda and other villages in the neighbourhood of Ranitalao and Utai for sale at the markets held there. Most of the people in this tahsil cart their surplus produce direct to Nandgaon. Drug has failed to establish itself as a trade centre. Important trade centres outside the tahsil are Jalbandha, Gandai, Chhuikhadan, Deokar and Berla for the north of the tahsil, and Gunderdehi, Dondi-Lohara, Balod, Sikosa and Maligaon for the south of the tahsil.

At Dhamda, workers in brass muster strong and Kostas used to be of importance in many villages. Many of the old tanks are owned by Kostas, but now, with the exception of Kariasau, there is no one of this caste worthy of notice, and this caste suffered severely in the famines.

This tahsil has always been well placed with Raipur to the east and landgaon to the west.

Exports.

53. No separate figures of either export or import can be given for this ahsil. I have obtained details of the traffic at all the stations in this district and at Raj-Nandgaon by the courtesy of the Traffic Manager of the Bengal-Nagpur Railway. At Bhilai within this group and Kumhari in the Raipur Tahsil between Bhilai and Raipur nothing is done and at Drug very little. I summarized these figures in my note for the Decennial Progress Report, an extract from which is given below---

"The second statement shows imports and exports from Raipur station only under various heads from 1838—98. The import of cotton, twist and yarn, *European*, rose to 180 tons in 1892, but the average is only 84 tons. Cotton, twist and yarn, *Indian*, reached its maximum under famine conditions, when the import of the European commodity fell to its lowest point, *i. e.*—

	European.	Indian.
	Tons.	Tons.
January 1897 to June 1898	 27	1,573
Average of 10 years for 18 months	 126	1,024

"Cotton piece-goods, European, reached 454 tons in 1892; average of 10 years 287.

"Cotton piece-goods, Indian, average of 10 years 260 tons, but supplanted the European article to a great extent under famine conditions.

"Brass and copper, wrought-Imports increased steadily up to 1893, 223 tons, since when there has been a decline; average of 10 years 129 tons. "Iron suddenly rose to 1,644 tons in 1892; this was abnormal, but since then an average of over 400 tons has been maintained.

"Kerosine oil reached its maximum in 1895, 769 tons.

"Salt reached its highest figure in 1891-4,842 tons, but this import has been very regular; average of 10 years 4,523 tons.

"Sugar, with an average of \$28 tons, made a sudden bound in 1898 to 1,539 tons.

"The import of timber, firewood and bamboos sprang up in 1893 and has maintained high level since.

" The export of cotton, twist, yarn and piece-goods, Indian, has been small throughout.

"Myrabolams average 2,430 tons.

"Wheat, 20,360 tons in 1891; average 10,618 tons.

"Rice, 43,270 tons, June 1891 to June 1892; average 21,225 tons.

"Other grain, 7,374 tons in 1891; average only 2,019 tons.

"Hiles and skins, maximum in 1895, 903 tons; average 565 tons.

"Linseed, 9,099 tons, 1893; average 4,528 tons.

"Till and gingelly, 2,847 tons, 1898; average 1,467 tons.

"Sugar triffing.

"Similar figures for Nandgaon merely show to what extent trade has been diverted to Raipur. A fair amount of the export and import of this district is still carried on through Nandgaon, especially from the Drug Tahsil and parts of the Dhamtari and Simga Tahsils.

"There is no marked rise in the import of sugar in 1898, similar to that in Raipur. Detailed figures for the minor stations offer no point of interest. Imports are confined to kerosine oil, salt and sugar and exports to wheat, rice and other grain and oil-seeds."

The extension to Raipur coincided with a period of dull export, partly owing in the case of rice to failure in the Simga Tabsil. For wheat the years 1886, 38,000 tons, and 1887, 41,000 tons, have not since been equalled by both stations together, the highest subsequent figure being in 1891 37,000 tons. A ton of wheat or rice may for easy calculation be valued at Rs. 60 and a ton of linseed or til at Rs. 120. The highest export of wheat from Raipur station was 20,000 tons, value Rs. 12 lakhs. In the same year 26,000 tons of rice, value Rs. $15\frac{3}{5}$ lakhs, and 11,000 tons of oilseeds, value Rs. $13\frac{1}{5}$ lakhs, were exported. The total value of exports under these heads from the Raipur station amounts in 1891 to Rs. $40\frac{4}{5}$ lakhs, or nearly five times the land revenue. The highest exports of rice from Raipur have been in 1892 39,000 tons and 1895 36,000 tons, but linseed has never approached the figure for 1885, 26,000 tons, and til is quite unimportant in this statement.

The figures of years after 1898 show a great falling-off in wheat, rice and linseed, due to bad seasons, tompered by a largely increased export of til, which does well with a light rainfall. Most of the til comes, however, from the Zamindaris and States.

Section V.—The People.

54. The Drug Tahsil comprises 678 villages covering 1,165 square miles; Population. of these 43 are uninhabited. There are in all 729 mahals, or separate revenuepaying units. The population recorded at different times has been---

1871		•••	210,732
1881	· • •		250,363
1891		•••	280,400
1901	•••		240,632

As the first census of 1871 immediately followed the famine of 1869, when there is said to have been much loss of life, it would appear that as regards population the tahsil has been thrown back to a figure very little above that of the years immediately preceding that famine The decrease is greatest in the Nankatti group, 21 per cent., whilst in Patan the population is stationary at 252 to the square mile. Distribution occupation.

by

55. I am unable to compare the tahsil figures for occupations, but the district figures, of which the most important are shown below, give a very fair idea of the tendencies in this tahsil also:---

Year.	Interest in land. sub-order 10.	Agricultural la bourers.	Agricultural la bourers of whom Soujias.	Végetalıla gro m . c:s.	Catton.	Iron and steel.	Money-lenders.	General Jabour.	Beggara.
1801	 882,708	273,633	167,327	8,354	63,788	13,031	1,458	52,465	13,3 44
1901	750,008	334,061	112,165	5,875	47,296	10,660	5,237	25,304	14,2 44

District Total.

Apart from the general decline, which affects the whole population, the following points are worthy of notice; the increase of 18 per cent. in labourers at the expense of the land-holding classes and permanent labourers; the great falling-off in petty gardeners and fishermen, these classes suffer heavily during famine; a very heavy decline in cotton-workers; the decline in the lac industry, which, however, does not concern the Drug Tahsil; the great increase in money-lenders and the decrease under general labourers. These, in their way, are all signs of the hard times, and even a large number of the religious classes seem to have been starved out and to have gone in search of wealthier disciples elsewhere. The only points on the right side are the increase in brick and tile-makers, in artificers in building, and in workers in gold, silver and brass. The increases are small no doubt, except in the proportionato increase in the number of tile-makers, but still they may be taken as an indication that prosperity was increasing prior to the bad years. These are substantial classes that can last through bad seasons. The makers of glass bangles and other trifling amenities of life do not show the same power of resistance.

Famines have been too frequent visitors lately for it to be necessary for the Settlement Officer now to analyse the population likely to require relief, but it may be worthwhile considering whether the extraordinary figure of 1900 will ever again be reached or exceeded. The maximum figure was reached in August, 706,846, but that was due to the free kitchen policy for workers, which was not locally acceptable and was discounted so far as possible. The true maximum may be taken at 654,626 at the end of May. The mortality was never very heavy in 1900, and therefore the census taken immediately afterwards may be accepted as giving a more correct estimate of the population than the census of 1891, most of the deficit being charged to the famine of 1897. The census of 1901 gave a population of 1,440,000, and calculated on this figure the number on relief in May came to 451 per cent. and was of course still more than this in the open khalsa, the jungly tracts having obtained some crop and having resources in time of famine that are not available in the open country. The census results of the adjoining native states put any comparison in that direction out of the question, even if the crop failure there was as complete. The maximum on relief in the Bilaspur District, which adjoins Raipur on the north, was also in May 280,865, or approximately 28 per cent. of the revised population, and the difference be-tween the two districts is striking. But there are two important considerations that materially affect this discrepancy. Firstly in Bilaspur a far larger percentage of the population is found in the jungly tracts, and, secondly, crops were a little better in the Bilaspur District, vide paragraph 23 of the Provincial Famine Report for 1899-1900. A narrow strip of the Raipur District along the Bilaspur border, that I inspected last year, had certainly had something better than the rest of the khalsa, and whereas the normal double-cropped area of the Raipur District is double that of Bilaspur, in 1899-1900 the Bilaspur doublecropping was double that of Raipur. The importance of this does not lie in the value of the double crop, but in the fact that where double-cropping was

possible, rice must have given some outturn, and in the general indication given thereby. The Bilaspur mensoon rainfall exceeded that of Raipur by -50 per cent. Now below 4 annas in Chattisgarh at present every anna of deficit makes a most important difference, and I estimate that the difference in the demand for relief between outturn nil and outturn 2 annas would not be less than 30 per cent. of the population. The outturn of Raipur in 1899 of both crops would be overestimated at 6 pies in the open tracts of the khalsa ; if Bilaspur had something better than this, the smaller demand for relief requires no comment. If this explanation of the difference between the two adjoining districts is not adequate, the fact still remains that in Raipur very strong measures were taken to keep down the numbers. The wage scale was based on price rates 25 per cent. below those prevailing, no Sunday wage was paid for some months, mates were required to work, and tasks were raised beyond the maxima previously accepted. Even elimination by selection was attempt. ed, a most dangerous experiment in acute distress. With prices ruling as low as 9 seers to the rupee in the interior, from 2 to 3 lakhs of people were employed on village works at wage rates of-

Men	• • •	5	pice.
Women		4	"
Children	•••	3	11

For the present year 1902-1903, the rainfall of the second period was so capricious that any estimate became very difficult, but it was calculated that at least one lakh would come on relief. Up to date about 35,000 only are on relief, with 11 camps open, and only partially filled. If the task is not excessive, this shows that the people do not come on to work relief except as a last resort, and if the numbers continue low and there is no excessive mortality in the rains, this will be a fair proof that relief as given during the hot weather of 1900 was not excessive. In June last, 1902, in a note for the Decennial Progress Report, I wrote as follows:—

"Before closing this paragraph I may note one very satisfactory point. The extent to which embanking of rice land is being carried out this hot weather is extraordinary, not only in my own experience but according to enquiry from the people, and I think also that the very small export of rice may be taken with this. I do not think that this is altogether due to the shortness of the rice crop, but that the cultivators have at last learnt their lesson and are storing food and seed-grain against forther possibilities of failure. During the last ten years the people have passed from the height of prosperity, attended by carelessness for the future, indolence and neglect of cultivation, through a period of intense stress, when even the well-to-do have had to labour beside their own labourers for months and during the worst of the hot weather at a season when they had given up expecting their own servants to work, and to herd together in public kitchens, a cepting the name of kangals, to what it may be hoped will prove more than a temporary breathing space. I think, and I trust that I am right, that they have profited by their sufferings, and that whatever failures may be in store, matters will never again be as bad as in the famine of 1900."

If the view expressed in the last sentence was correct, it affords some explanation of the small number coming on relief this year. But the short breathing space has not been prolonged, and if next year there should unhappily be a complete failure of crops equal in intensity to that of 1899-1900, the number that would require relief would again not fall below 50 per cent. of the population of badly affected tracts.

56. Omitting fractional shares villages are held by malguzars as Malguzars. follows:---

1	ts Kurmis.	es Brahmins.	Lelis.	ce Baniyas.	co Rajputs.	4 Lodhis.	2 Gouds.	w Halbas.	10 Thetwars.	L Kostas.	Sonars.	Chamars.	4 Marwaris.	12 Bairagis.	91 Mahratas.	Muhammadans.	81 Kayeats.	61 Other castes.
Name of vil- lages held.	130	113	88	67	56	35	20	20	19	16	15	14	13	13	18	12	10	22

Three hundred and thirty-soven villages are held by cultivating castes. In the Dhamdha group there is a good Lodhi community. In Nankatti, Baniyas and Rajputs have been materially assisted by the famines in getting rid of Chamar tenants. The Chamar malguzars are all poor. Kurmis from the adjoining Simga Tahsil are gaining ground. In Drug there is a very good cluster of Kurmis, and the Baniyas and Brahmins are not oppressive. In Patan the Brahmins and some of the Kurmis are very wealthy. In Ranchirai most of the villages are held by Tolis and Kurmis, but the Rajputs are bad managers or oppressive, and the Marwari villages are ruined. In Arjunda, Kurmis and Telis are very numerous especially in the west. In the east the Rajputs are spendthrifts and cannot sustain their villages in bad years. In Pinkapar and Bhandera, the Gonds and Halbas are found. They cannot support unfavourable seasons. Though many of the malguzars are very wealthy, there are but few who hold many villages. In the north Joharsing, Lodhi, has eight villages, and Ramchand Dau, Baniya, the same number. (Dau was the term by which the patels were generally known. The patel was set over a number of villages, to each of which there was a gaontia). Other members of the Agarwal Baniya family, though not having many villages in this tahsil, have also villages in other parts of the district. They are quarrelsome and litigious, and some are heavily involved. In the south-east Sundarlal, Rajput, has nine villages and others in the Dhamtari Tahsil. In the centre Santokh, Kurmi, holding four villages and a share in another, is very influential, and so also Raghunath Misar with four whole villages and shares in two others. Kariasao, Kosta, with three whole villages and shares in four others in the south-west, holds many villages in other tabsils.

57. I show below transfers which had taken place in the Drug Tahsil (1) between Settlement and attestation, (2) between attestation and revision, and (3) sales and mortgages since revision. Head No. 1 has already been fully dealt with in the Rent-rate Reports and head No. 2 has been dealt with in the Assessment Reports of Dhamda, Patan and Ranchirai and in the Rent-rate Report of the other groups. Chamars were the principal losers in proportion to the small number of villages held by them, but a good many Brahmin villages changed hands. Gonds and Halbas lost several villages in the south. Kurmis and Brahmins were the principal incomers :--

전로나서의 예상품

Serial	Name of group.		MENT	SETTLE AND MATION.		ATTEST. And Sion.	OVT 82	SINCE SION.	812	GAGES (CE SION.
No.			Whole villages.	Shares.	Whole villages.	Shares.	Whole villages.	Shares.	Whole villages.	Shares.
1	Dhamda	•••	б	12				3		1
2	Nankatti	•••	2	23	7	5				
3	Drug		2	17	8	3		3	•••	3
4	Bhilai		7	9		5		3		
5	Potan		2	5				1	.44	•••
6	Ranchirai		5	7			1	4	8	1
7	Arjunda		8	11		•••	2	2		4
8	Pinkapar		8	8				-14		1
9	Bhandera		8	15				5	1	•••
	Total for the Tabail	•••	31	107	10	18	8	20		9

Prior to attestation, there were fewest transfers in Patan and most in Nankatti. Between attestation and revision matters came to a head in Nankatti; 7 whole villages and 5 shares were transferred, making a total of 9 whole villages and 28 shares since settlement.

34

Since revision Telis have sold 4 shares=Rs. 1.5.4, Brahmins 5 shares= Rs. 1.15.8, and Marwaris 2 villages and 3 shares=Rs. 3 The remaining village and 8 shares are distributed amongst 6 different castes. Chatterbhuj is getting rid of the Gond villages which he cannot manage. Marwaris are prominent amongst purchasers with one whole village and 6 shares=Rs. 2-10-8, and Kurmis come next with 4 shares=Rs. 1-7-2. The mortgages are mostly for small sums, and except in one case not such as to imperil the property. In 13 out of the 23 villages and shares sold the revenue was practically not touched in the recent revision. The highest acreage incidences of sales are Rs. 13-15-10 between Kurmis and Rs. 13-2-11 between Brahmins on small shares. In 4 cases the price fetched exceeded 30 times the revenue and in 6 cases 20 times the revenue. In the other cases lower incidences on revenue were obtained, but no doubt there was some other consideration of old debt.

The following transfers which took place prior to attestation show the value of proprietary right then :--

Area in acres.	Price paid.	Rate per acre.	Revenue	. • Incidences on revenue.
Acres.	Rs.	Rs. a. p.	Rs. s. p.	Times.
1,220	13,100	10 11 10	300 0 0	44
1,159	13,000	11 3 5	270 0 0	48
325	5,000	15 6 0	112 8 0	44
924	14,000	15 2 4	410 0 0	84
84 5	5,000	14 5 4	90 0 0	55

58. Times are hard now-a-days for the improvident malguzars. The rate of interest has been doubled from 12 to 24 per cent., and even then money is difficult to obtain, and a percentage is deducted from the principal according to the necessity of the borrower. Villages are being foreolosed for claims which are in some cases altogether disproportionate to the normal value. In time of famine it is distinctly a case of "to him that hath," and it of course makes for the ultimate good of the country, that the improvident should be displaced, but it is not a pleasant process to assist at. Paragraph 43 of the Revenue Report of this district for the year 1901-1902 runs—

"The number of private sales of mahals or shares rose from 26 to 59 and that of compulsory transfers from 26 to 68. The increase in both kinds of transfers was chiefly due to the indebtedness of the proprietary body and their inability to pay otherwise than by transfer, and partly in case of compulsory sales to disposal of Collector's cases, which had been long pending."

The figures of previous years as given in the Revenue Reports available are under both heads-

1692-1898.	1898-1894	1894-1895.	1695-1896.	1896-1897.	1897-1898.	1898-1899.	1699-1900.	1900-1301.	1901-1902.
98	86	78	80	79	85	65	45	5 3	127

These figures are for the whole district. No doubt court cases in which postponements had been given, in the hope that the debtor would, if given time, be able to save his property in whole or part, could no longer be kept pending, and this would explain the increase after the low figures of past years, but the increase in private sales tells its own tale, and it is probable that the renewed failure of this year will deprive many of their last chance of escape.

59. The percentage of home-farm on occupied area by groups varies from 33 in Dhamda and Drug to 28 in Patan, and the Tahsil average is 29 per cent.

Large increases have been detailed and commented on in the Rent-rate Reports. Many malguzars hold more than half their villages, and such cases are to be found amongst all castes. It is worthy of notice that if a malguzar holds 40 per cent. of the occupied area and his revenue and cesses amount to 60 per cont. of assets, he ceases to obtain any advantage from enhancing rents, except from the ad-interim profit. At the next settlement, the whole of the rental will go to puy revenue and cesses, and without any profit, he has an increased responsibility and a larger deficit to make good in bad years. If he holds more than 40 per cent. or revenue and cesses comes to more than 60 per cont., enhancement will be an absolute loss to him except for the ad-interim profit. If malgurars cease to find profit in enhancement, the difficulties of the Settlement Officer of the future will be greatly enhanced. If given a free hand in this district, I should not hesitate, during favourable seasons, to double the rental, in order to stimulate the tenantry to industry and to make their land less attractive to non-cultivating money-lenders. I should not hesitate, because the open action of a limited number of malguzars has shown clearly what the possibilites are, and how very far rents fall below a fair demand. But if such demonstration were not available, I should propose an enhancement of 10 per cent. with hesitation, and should prefer to test my proposals over a few villages first before applying them to a whole tahsil. It is obviously desirable that Government should incur no risk of enhancing a people beyond a fair demand, and yet the limits of a fair domand cannot be ascertained without experiment. The malguzar is obviously the person to make that experiment. If he pushes rents too high, no blame falls on Government, and he can reduce rents of his own motion, or be required to reduce them; but Government cannot experiment in this way. The Settlement Officer will not risk fixing rents, which may be too high and have to be reduced. So long as settlements continue, and Government undertakes the responsibility of fixing rents, the Settlement Officer requires every possible indication to assist him in his work. From this point of view, it is most undesirable that malguzars should be blamed for pushing up rents. I have at different times had six Assistant Settlement Officers, and each of them has on occasions described malguzars as tyrants merely because they have pushed up rents. Why, I cannot say. There was no justification in the cases with which they were dealing. In this district such an attitude is singularly out of place.

Again, what treatment do malguzars receive at the hands of the courts? I can only find statistics in two of the Revenue Reports of recent years. They are as follows :--

Applications.	Successful.	Unsuccessful.	Pending.
58	9	44	5
77	12	53	12

It is not fair to the intelligence of the malguzars to suppose that so large a proportion of cases taken into court were extravagant, and if not, is this what is wanted. It is not wise to appoint an agent and then thwart him in every way. The malguzar was, as I take it, intended to be a Deputy for Government, an aid to the easy collection of the revenue of which he was awarded a large share, a means of supplying the capital so necessary for the development and maintenance of agriculture, a guarantee for the improvement and keeping together of his village, and finally an agent to from time to time, according to his judgment, increase rents and periodically at settlement share the proceeds with Government. If this was the conception, I submit that I have sufficient faith in the intelligence of the native to believe that it was a good one. But I also submit that the malguzar has not been treated as a sharer, but too often as an enemy of the tenant (merely because he has raised rents) and therefore to be despoiled. The easy-going man, who leaves rents alone and allows his village and his tenants to deteriorate as prices rise (a native's first idea is not to get more money but more aram) gets some share in any enhancement that the Settlement Officer

may make. The enterprising man who has pushed up rents and shown him how he may take that enhancement, finds his whole profit assimilated and himself disgraced and branded as a tyrant in front of his people. The question is a serious one for a Settlement Officer, for the time may not be far distant when malguzars will not only not enhance but even press for reduction.

A malguzar of character is all powerful in his own village. No law 60. that can be framed can bind him. He is or always can be there. If a tenant goes against the malguzar, the malguzar without transgressing any law can stop him drinking from the village tank, can refuse assistance and prevent others giving him assistance with seed loans, &c., can forbid the village herdsman to graze his cattle, can even drive the cattle into his fields. If he is unscrupulous he can do a good deal more. He is on the spot and his control is absolute, Such cases are not numerous, but I can give instances of a Bhat, a Rajput, a Gosai, a Brahmin, a Bania and evon a Kurmi and a Lodhi who have cleared their villages of tenants, not in the jungly tracts, but in the long settled open country, and all except the Gosai within this one tahsil.

Such cases show that it is useless to try and bind malguzars by sections and clauses and if so it is unwise to introduce inoperative restrictions in their dealings with tenants. It is necessary to enlist their interests ; first, they must see their profit in co-operating with the wishes of Government; and, secondly, they must see that they will suffer if they do not. For the second purpose, the obvious remedy, speaking after the event, would have been to reserve power to, in the last resort, cancel their settlements and turn them out of the village. This is now impossible, and the only expedient left is to invest the Deputy Commissioner with power to affect the amount of the assessment at next settlement by the introduction of character books or some such device, and to make a very wide difference between the assessment of a good and of a bad malguzar For the first purpose, it is not profitable in this district for malguzars to have. low-paying tenants. They find much more profit in cultivating the land them-selves and the low rent makes the land an attraction to money and grain londers whose intrusion into the village is resented. I have known cases where the malguzar has paid extraordinarily high prices to buy out other malguzars or money-lenders who have acquired holdings by transfer in his village. The remedy for this is to allow and to oncourage the malguzar to raise rents; to remove or refrain from enforcing restrictions, which make it appear that he is looked upon as a danger and not as an assistant; and to make such an assessment that the malguzar will profit by raising rents, and not find at settlement that the profits go to Government and the increased responsibility to himself. The present method of assessment is generally equitable, but the malguzar looks to results and not to methods. If the home-farm had been kept within limits there could be no serious objection, but with a possible revenue of 60 per cent. of assets, on which cesses amount to another 8 per cent., any certainty of profit from enhancement disappears when the home-farm reaches 32 per cont. This limit is already exceeded in two groups. If the co-operation of the malguzar is valued as an aid to settlement, the only method that occurs to me for providing for such cases will be to guarantee the assessment of a percentage of the home-farm at the rent-rate of the preceding settlement and not at the enhanced rate.

Concealment is suspected all over the tahsil, and especially in the Concealment of **61**. Patan, Ranchirai and Arjunda groups. Very little admission of concealment assets. has, however, been obtained. Mr. Gajraj Singh, Assistant Settlement Officer, was most successful. Admissions were made in 26 villages in all, but in many of them the amounts were very triffing, and probably only a sop to stop enquiry. The most striking cases are found in Marra and Amalori; they came to light owing to disputes. In Marra concealment to the extent of Rs. 675 was admitted raising the rontal 156 per cent. and in Amalori Rs. 196 raising the rental 166 per cent.

The most remarkable single instance was of a tenant, who was shown as paying Rs. 7, but admitted that he paid Rs. 40.

Many malguzars also take heavy nazaranas on transfers and other new settlers. The nazaranas are generally concealed, and I did not become aware of the extent of this practice whilst in the Drug Tahsil, but in the Dhamtari Tahsil I had the matter enquired into in every village inspected. Owing to the stoppage of settlement I have not had the figures of admitted nazarana compiled, but in one village between the years 1896 and 1899 nazarana to the amount of Rs. 1,925 was paid on the transfer or settling of small areas amounting to only 82 acres in all. The revenue of this village is Rs. 500.

Other devices for enhancing income are to take grain from the tenants on the ground of keeping a reserve of seed for time of need (this is especially done by malguzars, who have little or no home-farm), and also to take barars or contributions. About these barars there is some doubt; sometimes they are admittedly taken every year in villages near the jungle for allowing the tenants to take the jungle produce. In other cases they are said to be only taken occasionally, when the malguzar has to incur any special expenditure as a wedding or a pilgrimage or a law suit. Sometimes a small annual collection is admitted for religious purposes, *i. e.*, for ceremonies common to the village. I think that these barars are a step on the way to concealment of rent; the malguzar is not prepared to tell any falsehoods, so he effects his objects by some such device, hoping that it will not come to notice.

Tenants.

Berial No.	Name of caste.		A	В	c	D	Е	F	Total
3	2		3	4	б	6	7	8	9
1	Chamars		55	962	2,761	1,138	568	376	5,860
2	Telis		135	1,795	1,914	437	811	273	4,865
8	Kurmis		118	705	878	157	106	58	2,022
4	Gonds		14	397	764	184	203	157	1,719
б	Halbas		18	615	375	54	179	138	1,879
6	Gabiras, Bawats, Ahirs		11	228	598	161	149	117	1,264
7	Marars		4	152	285	107	151	43	745
8	Dhimars		L	100	267	77	50	40	535
9	Kewats		1	109	217	52	102	31	519
10	Mahare		8	111	220	63	74	27	503
11	Brahmans		49	167	179	29	24	9	457
12	Dhobis		•••	115	193	32	50	19	409
18	Lodhis		30	120	217	22	4	13	406
14	Kalars		6	153	183	30	31	14	867
15	Others		185	537	825	288	268	12 2	2,025
	Total		635	6,266	9,826	2,831	2,270	1,437	23,265

62. The tenants are shown by caste and classification below :---

The letter F* was introduced to designate tenants who were not in the village when it was attested, but who had not definitely given up their land and might return.

The classification by letter is next given by groups as made at revision in 1901. Most of the F class had been eliminated, and except for a few absolute

* For definition of other classes, see paragraph 66.

Serial No.	Name of Assessme	at Group.	A	в	С	D	Е	F	Total.
1	2		3	4	5	6	7	8	9
1	Dhamdha		86	500	1,195	255	69	4	2,109
2	Nankatti		50	412	1,162	507	173	21	2,325
3	Drug		141	652	1,235	348	183	9	2,568
4	Bhilai		89	781	1,281	480	132	14	2,777
5	Patan		72	709	1,041	140	96		2,058
6	Ranchirai		67	487	847	187	268	•••	1,856
7	Arjundah		76	921	1,123	387	337	5	2,849
8	Pinkapar		65	658	677	93	293	5	1,791
9	Bhandera	••·	70	1,095	892	124	466	32	2,679
	1	'otal	716	6,215	9,453	2,521	2,017	90	21,012

occupancy tenants, they were all men who had absconded owing to the failure of the rabi in 1901:---

At revision it was found that the total number of tenants had fallen by 2,253 and naturally the number of D, E and F classes had shrunk considerably. Those classed as A had actually increased in numbers, malguzars and tenants of good villages having taken up land in villages that had deteriorated and where for the time land was not in strong demand.

The percentage of desertion amongst the important castes is :---

		T)	Number.	Absconded.	Percentage.
1. Chamara	•••	a d	5,860	555	9
2. Telis			4,865	385	7
8. Kurmis		14	2,022	87	4
4. Gonds			1,719	248	14
5. Halbas			1,379	139	10
6. Rawats			1,264	139	11
7. Marars	•••	-	742	40	5
8. Dhimars		•••	535	5	i î
9. Kewats	•••		512	122	24
	•••			39	
O. Mahras			503	09	8

Confusion has occurred between the Dhimar and Kewats. They are both fishing castes. Apart from this, Gonds have, as might have been expected, deserted to a greater extent than any other caste. They are, however, closely followed by Rauts, Halbas and Chamars.

The Lodhis, total 406, desertions 47, have fared very badly considering their reputation as cultivators. They live in a colony in North Dhamda. One Lodhi malguzar has, however, cleared his villages of tenants, and another having 8 villages, and being in the hands of his agents, allowed some of them to deteriorate a good deal.

The number of desertions has been greatest in the Dhamda Group, where the figure has been augmented by the action of the malguzars in 1897. Desirous of increasing their home-farms, they did all that was in their power to get rid of tenants.

The greatest number of A class tenants is found in the Drug Group, but on the whole Patan maintains its superiority, which is manifested by every test applied. The most substantial castes are the Brahmans, Kurmis, Lodhis and Kostas.

63. The table below shows the transfers of the absolute-occupancy and Transfers of tenant occupancy right that took place in the year of attestation and between

attestation and revision. All these transactions were made under famine conditions. Figures of some transactions that took place prior to the famine of 1896-97 have been commented on in the Rent-rate Report, but this point was not fully enquired into at the outset.

In the Dhamtari Tahsil full enquiry was made, but settlement was stopped and Rent-rate Reports not written, so that the village figures have not been compiled. However, in one group, where the transfers had been numerous, I totalled up the amounts and found that in 40 villages 2,003 acres had changed hands for a sum of Rs. 49,660. Land is more valuable in the Dhamtari Tahsil than in any part of the Drug Tahsil, except Patan and Ranchirai, and the Dhamtari Tahsil did not suffer in the first famine :---

and the second secon	Аве	ол. утв. Оссора:	NCY.				
	Area.	Nent.	Amount for which sold.	Area.	Rent.	Amount fo r which sold.	Remarks.
At attestation After do. To	 600*36 619*54 1,539*90	478 12 4 342 4 3 	8,089 2 0 7,146 2 0 15,235 4 0	970-39 903-51 1,873-00	608 0 11 559 15 11 1,166 0 10	11,106 0 0 6,823 6 9 17,934 6 9	

The demand for the absolute-occupany right showed no falling off after attestation, but there is a remarkable difference in the occupany figures. Roughly in both rights the transfer value shown is Rs. 10 per acre, but the incidence on the rental is greater in the low-paying absolute-occupancy right. Omitting small areas the best prices are found in—

			Авз	OLULE-OCCUL	ANCY.	0	OCCUPANCY.			
			Area.	Ront.	Amount.	Arca.	Rent.	Amount.		
					Rs.	1				
Bhilai			125	69	1,531	150	98	2,017		
			167	76	2,704		•••			
Ranchirai			82	48	1,330	Patan 205	109	2,819		
	Total		374	183	5,565	355	207	4,836		
			=Rs. 15 per	acre and 30 t	imes the rental.	= nearly Rs.	14 per acre the rental.	and 23 times		

Sub-letting.

64. The rates for sub-letting are by groups :—

Serial No.		Name of Group.	Area.	Re	Rate per acre.					
					Rs.	8.	p.	Rs.	. a.	P
1	Dhamda			 300.00	496	8	6	1	10	0
2	Nankatti	•••		 881.00	1,206	9	1	1	6	0
3	Drug			 336 [.] 84	668	5	8	l	15	9
4	Bhilai	• • •		 261 00	564	6	0	2	2	7
5	Patan			 239.80	754	1	0	3	2	4
6	Ranchirai			 435·00	871	15	9	2	0	1
7	Arjundah			 421-66	1,040	13	4	2	7	5
8	Pinkapur			 271.42	712	2	8	2	9	11
9	Bhanders			 356 84	921	11	1	2	9	4
			Total	 3,503.56	7,236	9	1	2	1	1

A larger area than this is sublet, and the details thereof are shown in the Rent-rate Reports, but land is very often handed over on the same rent for a few years on account of debt; such cases have been excluded. The rates arrived at agree fairly well with the description of the groups. Nankatti with poor soil, and Dhamda with rabi cultivation, which is not as much appreciated as rice, stand lowest. Drug, Bhilai, and Ranchirai stand close together. The Arjunda rate corresponds with the west of that group, but not with the east; Pinkapar and Bhandera rates agree with the pressure of population, and Patan again comes out easily first. Rs. 1-8-0 may be taken as a fair rate from the poor soil villages and Rs. 2-8-0 for black soil.

65. In 9 villages ordinary tenants were paying at rates in excess of Re. 1 High rents, at differper acre at Mr. Hewitt's settlement, the highest rates being Rs. 1-7-11 and Rs. 1-6-1.

In the regularly settled area 55 villages were paying rates of one to two rupees per acre.

The country that may now be described as the summarily settled tract was taken up by Mr. Hewitt first, and it would appear that he gained confidence as he gained experience and pushed up his assessments, so that rents had risen also to meet the demand. These figures would appear to show that a rate of one rupee per acre was by no means an excessive demand in Mr. Hewitt's time.

If it be said that these rates were exorbitant, and that the villages must have been ruined or the rates reduced, it is difficult to meet this argument because of the extensive concealment which sprang up, but in this tahsil there is at least one village that can be cited. The figures are as follows :--

	\$7:11		Irdinary rate at Mr. Hewitt's settle-	Occupancy rate at	AT ATTESTATION.				
Village.			ment,	the summary settlement.	Occupancy.	Ordinary.			
			Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.			
Didga	 •			116	130	1 11 2			

This village showed some deterioration after the second famine, but this was solely due to three Chamars of the A class with large holdings who had quarrelled with the malguzar. The village is an inferior one for the group (Patan) in which it lies. It is certain that the revenues were not reduced, and if it could be established that the rent-rates of the 64 villages mentioned were reduced and not concealed, it would be difficult to explain how the malguzars continued to pay their revenues.

At Khan Bahadur Aulad Hussain's settlement in 47 villages of the Drug Tahsil different classes were paying at over Re 1 per acre, the highest rate being Rs. 1-10-4. Tahsil all-round rate Re. 0-9-5.

In very few of these villages is there any depression after two famines, one very severe, and my own opinion is that so far from a high rent-rate being harmful, it has been beneficial. With the advent of the second famine the question became immaterial from a settlement point of view, as the question of enhancement has had for the time to be shelved, and I merely note these details for the consideration of the future Settlement Officer. In the few villages referred to above, where there is depression, it is almost invariably due to causes other than bad seasons.

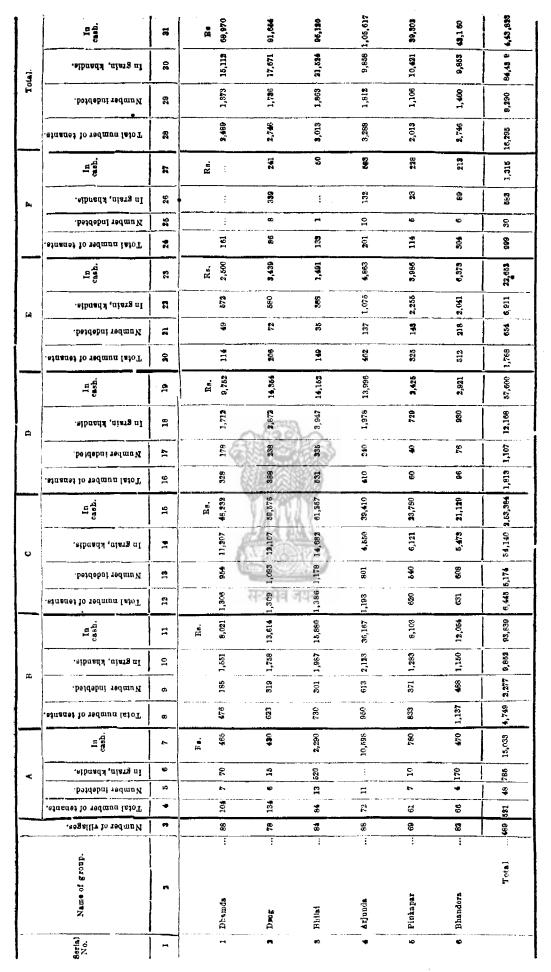
66. In my note for the report on the decennial progress, I wrote as Indebetedness. follows regarding indebtedness:--

"I give a statement showing the indebtedness of five groups Enquiry in Patan, Ranchirai and Nankatti was made in 1898, *i. e.*, immediately after the first famine, and the enquiry in Deokar and Anandgaon has been made this year 1902 or the second year after the second famine, which has not, however, been followed by favourable years as was the first famine. I regret that I am unable to furnish figures for a year prior to the first famine. Patan and Ranchirai have been especially selected as good groups and Nankatti as a deteriorated group. Anandgaon is the best of the Simga groups inspected this year and Deokar the worst. If desired, similar information can be given for the remaining groups of the Drug Tahsil, 1898, the Raipur Tahsil, 1899, half the Dhamtari Tahsil, 1901, and two more groups of west Simga and two of the Dhamtari Tahsil, 1902. I do not, however, delay this report, as the groups I have selected are quite sufficient and typical to show the state of affairs after the first and after the second famine :---

				Number of	Number of	Number		a	Over	
				villages.	tenants. indebted.		5 0,	150.	300.	800.
Patan				56	2,410	1,257	782	341	104	80
Ranchirai	***		···	49	2,006	1,173	768	210	69	26
Nankatti				84	3,084	1,525	1,076	874	56	19
Debkar				75	1,919	1,137	864	207	5 0	16
Anandgaon	•••		· • •	70	2,252	1,150	815	287	39	9
		Total		334	11,671	6,242	4,305	1,519	318	100

"I draw no inference from these figures except that indebtedness is very slight indeed, and that where there is heavy debt it is by no means an indication of deterioration. Patan was in 1898 and is now in very good condition. Figures from the best parts of Dhamtari would bear this out. The second famine did not increase debt chiefly because small lenders were hard hit and had nothing to lend, and the bigger men were also hard hit and afraid to make further advances, till they had to some extent recouped their losses. It might be supposed that they would of necessity have made fresh advances in order to save the first, and it was on this ground that my proposal to give them a guarantee was rejected, but the figures quoted for Deokar and Anandgaon and the state of affairs in other groups and in Dhamtari, for which I have not quoted figures, and local enquiry into the matter, prove the contrary. Numbers of tenants would not have come on relief if they could have got loans."

To this I now append a statement for the remaining six groups of this tahsil in greater detail. It is easy to summarize, but different men may draw totally different conclusions from the same figures, and this must be my excuse for including so many detailed statements. With regard to tenants of the **F** class the enquiry is altogether incomplete, but I give the few figures available to illustrate something of the losses that lenders suffer in bad years. Out of 999 tenants of the F class, information has only been recorded concerning 30, who appeared before the Inspector, but had disappeared by the time that I inspected the village. If the figures recorded for these 30 men be multiplied by 33, the loss involved over the whole 999 F tenants amounts to 19,239 khandis of grain and Rs. 43,395 cash, and valuing the grain at Rs. 3 per khandi, the total dead loss is not less than Rs. 1,00,000. The balance of outstandings is roughly, valuing grain at the same rate, Rs. 7,94,000, of which the recovery of Rs. 1,34,500 from D and E tenants is very doubtful.



D means that a man is heavily indebted and likely to lose his land. The discrepancy of showing 506 D tenants as having no debt is due to my order that tenants in bad condition, having insufficient cattle, &c., if they held large areas, should, even though free from debt, be classed as D not E. E means living from hand-to-mouth or of the status of a field labourer. A implies

substantial condition, money or grain lending. B substantial cultivating condition, plenty of cattle, debt not excessive. C fair condition.

Deducting the figures of the F class, it is seen that nearly two-thirds of the tenantry are now indebted, *viz.*, 9,260 out of 15,296, and from this it appears that the lower percentage of indebted tenants in the Patan, Ranchirai and Nankatti groups is due to these groups being at opposite extremes. The first two are in good condition, and indebtedness is less, Ranchirai being slightly inferior to Patan. In Nankatti, very depressed, the indebtedness is less because of lack of credit.

In the average groups now given nearly all the C class are indebted, but the debt is not heavy, and works out at 14 khandis and Rs. 49 cash per head of those indebted, or say seed-grain + Rs. 50 cash. Very few of the E class are indebted, as their credit is small, and still fewer of the A class who are themselves lenders. Of the B class less than half are indebted, and the debt including seed-grain is only Rs. 50 per head of those indebted. Heavy cash debt is only found in the substantial A class, average something over Rs. 300, and nearly Rs. 1,000 per head indebted for 11 tenants of the Arjunda group.

67. My remarks on the agricultural population in my decennial note apply equally to the Drug Tahsil.—

"Except for the development of the Chamar there is little to notice; Telis and Kurmis form the backbone of a tenantry that is on the whole good, though till recently somewhat spoilt by prosperity and tending towards indolence, careless cultivation and want of forethought. I have mentioned in the first section that there are signs of improvement in this respect. The Chamars have during recent years been at their worst. I referred to them recently in my Preliminary Report of West Simga; they seem to be subject to no moral scruples or restraint. Very few of them have any real respect for their Guru, and to lie, steal, destroy cattle and commit arson are every-day affairs; whilst the bolder spirits indulge in burglaries, dacoities and violent assaults. I do not say that they are all as bad as this, and I have come across many Chamars who were respectable and pleasant to meet, but I do say that in any village, where Chamars predominate, it is an even chance that the village is in a bad condition, the malguzar an absentee or without the least influence, and if the cattle of the village are spared, there will be losses of cattle in the surrounding villages. Other castes are so afraid of attracting to themselves the special enmity of the Chamars, who are very clanny, that they will often not make any complaint.

"The aborigines are not very numerous in the tracts that I have inspected; there are a certain number of Halbas and Gonds, but they have become more intelligent by association with Hindus. None of them are wealthy but many of them are fairly well off, and some of the Halbas make good malguzars.

"The relation of malguzars with their tenants is generally good with the exception of Chamars. Some are oppressive, but they are quite the exception. Kurmi malguzars especially have kept to the customary rates of interest on cash and grain loans, in spite of the trials of the two famines and the opportunities afforded thereby. Many of the more simple malguzars hardly recognize their powers as proprietors at all, and do not even settle the land of absconded tenants without first asking permission from a Government officer. The action taken to evict tenants is surprisingly small, even when they deliberately withhold their rents though able to pay. This may, however, be due to the fact that the defaulters are almost invariably Chamars and the malguzars do not take action through fear of insult or assault, loss of cattle and arson. Debt is generally small except in the case of the Agarwal Banias, Rajputs, and some Brahmins."

The Chamars were treated differently to other tenants in the Drug Tahsil, C tenants being enhanced in deteriorated villages where they had continued to withhold their rents from before the famine period, and in the Simga Tahsil, two years after the second famine, it was proposed to enhance even D and E tenants of the Chamar caste, where they were paying below the normal rate and had combined to withhold rents from before the famine period. The Government of India assented to this with certain qualifications, but remarked that it was not clear how the enhancement of rents would of itself tend to break down any such combination. The settlement of Simga has been stopped, and this is undoubtedly the best solution of the question; but had it continued the point was, not that enhancement of rents would produce any effect in breaking down the combination, but that the non-enhancement of Chamars, who by their refusal to pay rent before the bad years set in, and by their violence and

Chamars.

misdemeanors had alienated the malguzar and had thus materially contributed to their own deterioration, would cause them to suppose that their attitude was condoned and that their policy was a good one. It is well known to any Revenue Officer how much importance natives attach to side issues, *i. e.*, A goes to a field to which he lays claim, he assaults B who is in possession in the field. B files a complaint against A for assault. A gets off on an alibi. A will produce that judgment acquitting him of the assault as proof that the field is really his. In the same way the Chamar will twist his exemption from enhancement into an approval of his action. The idea is not my own; it was suggested to me by some of the malguzars concerned, and although the Commissioner and the Deputy Commissioner considered such action out of the question, the two malguzars who were included on the Board to consider the Simga Tahsil Preliminary Report supported this view.

Mr. Hewitt wrote at paragraph 110 of his report that the Chamars 68.laid claim to a very high antiquity among the inhabitants of the Raipur District, and then proceeded to discount this claim. The claim is still maintained and is admitted by the other castes. One point in favour of their claim, which is however often construed against it, is the fact that Chamars are found in great numbers on all the highlying ridges. I believe that it is admitted that when a new and jungly country is being occupied, the inferior tracts which yield an easy return are first brought under cultivation, and the richer tracts are brought under cultivation later. The lakhabata system is essentially a system of perfect equality, a principle which is also the essence of the Chamar religion. If the Chamars had found the other castes settled before them, it is hardly possible that this principle should have so thoroughly per-meated the whole district, whereas if the Chamars were settled on the ridges, which they now hold, and the other castes had gradually mixed with them and then spread further out into the rest of the country which is richer but more arduous to cultivate, they might in that way have imbibed the same principle of land distribution. As cultivators the most noticeable characteristic of the Chamar is his greed for land. The saying is ek tan baila, Taranga tak jot (with only one bullock he wants to plough all the way to Taranga). This is due to his system of distribution. Directly perfect equality had been established by the lakhabata, each individual set to work to break the monotony in his own favour. Those with few cattle struggled to keep pace with their better supplied competitors and worked their cattle unmercifully. As soon, however, as a sufficient number lost ground and felt themselves aggrieved they would call for a fresh lakhabata and the claim could not be resisted. The Chamars have a complete system all over Raipur, Bilaspur, Nandgaon and Khairagarh. The circle heads are called Bhandaris after the name of their head-quarters Bhandar. Sahib Das and Ajab Das have distributed this territory, and they travel about on elephants. They are received with respect and a collection is made by the Bhandari and presented to them, but their influence is not very great. Sahib Das gave me a list of 286 Bhandaris falling to his share in the Raipur District. He is since dead and a child Ajanan Das is in his place.

69.	The	rate	of	interest	\mathbf{on}	seed \cdot	advanc	es	is	as	follo	ws :	
	Ri	ce						$\mathbf{S}_{\mathbf{i}}$	wai	07	25 per	cent.	
	W	heat, g	ran	and other	unh	ari		D	erhi	i or	50	,,	
	\mathbf{E}_{2}	ceptin	g ci	lsceds and	lakh			D	uni	or	100	,,	

At present 50 per cent. is often paid for rice and 100 per cent. for unhari. The interest on cash loans has risen considerably. 12 per cent. or 1 per cent. per month used to be the usual rate for respectable tenants, but now this rate can only be obtained on deposits. Chamars owing to their untrustworthiness and bad behaviour have to pay very high rates of interest.

I have already mentioned that malguzars experience great difficulty in getting loans. I am told that they have to pay 24 per cent. with batta (a percentage of the loan that varies with the necessity of the borrower) deducted.

70. According to the census figures the number of permanent labourers Lab or sonjyas has been greatly reduced, and this agrees with the statements of malguzars and tenants. The sonjya gets one-fourth of the produce and a present

Rate of interest

Labourers,

of a blanket every third year. This shows the easy terms on which the cultivation is carried on in this district. The sonjya is allowed to speak his mind to his employer and to have his say in cultivation, e. g., the sonjya prefers the coarser kinds of rice as giving him a larger food supply; if the employer wants to substitute the better sorts so as to get a better price, he has to propitiate the sonjya with a cloth or other present.

Casual labour.

71. The wages of ordinary labour have fallen in response to the recent bad years by about 25 per cent. The woman's wage was 25 per cent. less than the man's, and the wage for reaping was 25 per cent. less than that for weeding. The reapers used, however, to be allowed to gather the fallen grain (sila), but now the employer gathers it himself. The reduction has brought all rates closer together and present rates vary slightly from village to village from two chauthiyas (*i. e* two-fourths of a katha) of coarse paddy or kodo for a man and $1\frac{1}{2}$ chauthiyas for a woman to three chauthiyas per man and two chauthiyas in three days for a woman. The katha to which reference is made here holds 4 seers and 9 chbataks of rice, and 3 seers 4 chhataks of paddy or kodon. The loss in weight by threshing is something less than one-third. Three chauthiyas unhusked are equivalent to one seer and 10 chhataks husked. Huskers used to receive two kathas of coarse paddy or kodon for husking one khandi and were also allowed to keep the kanki (residue of broken grain unfit for sale). At present husking is done by the tenant's own household, or if by an outsider, it is done for the kanki only.

In husking, pandhri gurmattya gives about two chauthiyas over 10 kathas per khandi :---

 khandi = 20 kathas.
 katha paddy weighs 3 seers 4 chhataks.
 khandi paddy weighs 65 seers.
 katha rice weighs 4 seers 9 chhattaks.
 kathas "47 "14 " Loss in weight 26 per cent.

all other varieties give less, i. e., between 9 and 10 kathas for one khandi.

Tank work is given in contract at 8 danganis to the rupee. If the soil is hard or the lift and lead heavy the demand is varied by the depth. The dangani is 5 haths or $7\frac{1}{2}$ feet and the full measure is 8 danganis by 1 dangani by 1 hath in depth=675 cubic feet. But as stated if the work is hard, this may be reduced to a munda hath, the forearm with the hand shut or to about one foot (the hands apart with the thumbs out and tips touching). The rate therefore varies from 675 cubic feet to 450 cubic feet per rupee.

For embanking, where there is no lead or lift, the rate is 40 danganis for a rupce, the width being half a dangani and the depth not more than 1 foot, so as not to spoil the field too much. The maximum here is therefore 1,125 cubic feet per rupce.

Emigration.

72. A record of emigration was commenced last year. The figures are as follows :--

	F	OR ASSAM.		Fo	Total of Columns		
Year.	Labourers.	Dependants.	Total.	Labourers.	Dependants.	Total.	4 & 7.
1	2	3	4	5	6	7	8
1902	639	137	776	818	50	868	1,644
1903	222	107	329	161	10	171	500
Up to 13th Feby. 1908.		***					

These figures do not show any great tendency to emigrate. They are above the probable normal owing to the present failure of crops. Large numbers have, however, temporarily left the district for work at Kharagpur and on the Gondia-Jubbulpore cross line. Exact statistics are not available.

73. The arrangements for the maintenance of kotwals will be dealt with Village servant. at the end of this Report. The kotwal used to get 10 kathas of dhan per plough of land. The Lohar or blacksmith was on the same footing, but in some villages his remuneration is at a higher rate.

The Raut or herdsman gets from 10 to 40 kathas of dhan per four-bullock plough, with one day's milk in three of cows and one day's milk in five of milch buffaloes, together with the droppings of the animals whilst grazing.

The Baiga, who may serve several villages, is paid according to his efficiency and the credulity of the people, usually 2 to 5 kathas of dhan per plough.

The Barber gets 7 to 15 kathas of dhan per adult male, but is more often paid in cash when his services are required.

The Dhobi is paid in cash according to his services.

74. At weddings and other occasions, the whole body of castefellows is of the people. not called in as formerly, when the entertainment was very simple and grain was a drug in the market, but only one member for each house. In other respects, however, the entertainment is much more lavish, including display of lamps, fireworks and dancing girls. Four or five hundred rupees is spent, where there was little or no cash outlay in the past.

Although I have seen plenty of gold and silver ornaments about at all times, and precious stones on festival occasions, I am told that the supply of ornaments is not so great as in the past, when all surplus cash was converted into bracelets and necklaces and waistbands.

Much more clothing is worn and of a better quality. Umbrellas are to be seen everywhere, and all but the very poorest wear shoes.

The quality of food has, however, I am told fallen off during the recent bad seasons, and where kubri mohar, chinoor, suklabhata, mahipaljir, dudhmanni and khowa used to be served up at weddings, hansa, burya bako, meghai, chilakat and sela are now used. The poor eat gurmattya of inferior qualityparewa, nandoor, dhowar and kodo.

It is the custom in this district, when the weather is considered cold, to keep a smouldering fire under the bed. In the past peas used to be placed on this fire; they apparently having the quality of giving out warmth. Peas are, however, too precious now-a days.

PART II.-ACCOUNT OF RE-SETTLEMENT.

Section I.-Correction of maps.

The lakhabata system results in very minute sub-division of the rice 75. land, especially in light soils, and this causes great difficulty both in the annual Land Record work and in all settlement operations. Before the present revision of maps there were in the Raipur khalsa 5,426,000 fields excluding sub-numbers. These were distributed as follows :--

Tabail.			Number of villages.	Number of entries.	Remarks.
Drug Raipur Dhamtari Simga	 	••• ••• •••	678 884 929 826	1,245,000 1,794,000 927,000 1,479,000	18 ryotwari villages are excluded.

Fractions of a thousand are omitted

47

General condition

The number of entries per village is lowest in Dhamtari, where a very large number lie in the jungly tracts of Sihawa and Balod, and in the open country the soil is black and the fields of fair size; 1,400 to 1,500 entries is about the average for the open tracts of this tahsil. In the Raipur Tahsil the average is highest, about 2,000 entries per village, but here also the average is lowered by the jungly trans-Mahanadi villages. Many villages have 4,000 to 6,000 entries, and in a few cases even these high figures are exceeded.

When the revision of this district was about to be taken up, the 76. Commissioner of Settlements, Mr. Caroy, who had carried through the previous settlement of the regularly settled tracts and the survey of the summarily settled tracts, decided to make an attack on this great volume of entries. When the survey of this district was taken up in 1883-84 a question arose as to whether it would not be better to omit the minor divisions of rice fields on the map and merely plot the outer boundaries. The answer was in the negative because of the difficulty in identifying fields when the inner divisions were not plotted and the small amount of plotting that would be saved thereby owing to the dolis (rice partitions) not being held in groups or chaks. Accordingly generally, though not invariably, a separate number was given to every rice partition. Mr. Carey decided at the present revision to make a distinction between the outer and the inner boundaries on the map, wherever groups of fields were found held by the same owner in the same right, and so reduce the number of field entries. This framing of chaks of course necessitates the entire re-numbering of the maps.

77. When the patwari receives his clean map after settlement, he keeps it up to date from year to year at his annual inspection, plotting fields in newly broken land and all other alterations; when his map is disfigured by many alterations, he prepares a clean trace during the recess season. If this programme is properly carried out, there is no necessity for a map correction party to prepare the way for the Settlement Officer; but Raipur was the training school for these provinces where embryo Settlement Officers, Assistant Settlement Officers and Inspectors learnt their work before despatch to other districts, and much of the original work stood in need of revision. Further, in the Raipur Tahsil the patwaris were furnished with maps on nainsook, which could not be touched without the ink running. Finally, the patwaris, though on the whole wonderfully good, considering the material from which they were manufactured and the conditions under which they were trained, included a large number who either could not or would not keep their maps up to Some were incompetent; others, mostly of old standing, wrote up date. their papers in the village, and trusted to the inadequacy of the supervising staff and the general uniformity and stability of the cropping to save themselves from detection. Correction of the maps was therefore indispensable, and the reduction of numbers by chakbandi was made an essential part of the operation.

78. In 1896 then map correction was taken up in the Drug Tahsil. Owing to the staff for supervision being inadequate, and to the dislocation caused by the famine of 1896-97, the results were unsatisfactory. The Raipur Tahsil was taken up in 1897-98; the patwaris had been kept out in their circles owing to famine during the rains of 1897, and no proper preparation had been possible; the staff of inspectors was insufficient and of bad quality, the patwaris were the worst in the district, and the original work very inferior. The tahsil included nearly two million khasra entries.

The field season was prolonged till long after the rains had broken, and even then the new traces had not been numbered and the new khasras had not been prepared. Areas gave Mr. Dunne, Assistant Settlement Officer, infinite difficulty in office. The probing for error, often futile because of original over and underworking, in a village containing several thousand numbers, is most trying and exacting work. The papers could not be completed, and were made over for attestation with jamabandis not compiled and both map and khasra teeming with error. With 884 villages and the field work not completing till July, it is clear that an Assistant Settlement Officer with one assistant cannot check all the villages taken up in the later stages of the field season.

Four villages had to be re-surveyed at attestation and large blocks in many villages. Some villages that were patched up must still be resurveyed when famine conditions pass.

This is not pleasant writing, but if I bury the past, the lesson may be lost. Map correction sounds simplicity itself, and no doubt is so in most districts, but when nearly-two million entries have to be dealt with in one tabsil, it becomes a far more complicated operation than the original survey.

79. Map correction was successfully carried out in the Dhamtari Tahsil where the fields are larger, and although the Inspectors and patwaris were ordered out half way through the office season with areas and jamabandis incomplete to prepare for the great famine of 1900, I was able to arrange for Mr. Dunne, the Assistant Settlement Officer in charge of Map Correction, to hold a large famine charge in the Dhamtari Tahsil, and that 14 out of 15 Famine Circle Officers were Inspectors who had been trained in map correction and the fifteenth was instructed by Mr. Dunne. The work proved very well at attestation.

I may note that although the Dhamtari Tahsil is easy work for this district, still this one tahsil contains more fields than any whole district outside Chhattisgarh in these provinces except Jubbulpore.

80. Very good results were also obtained in West Simga, and although East Simga has not been subjected to the test of attestation, the areas were passed successfully. The supervising staff had been more than doubled. During map correction operations, 11 villages were resurveyed in the Drug Tahsil, 20 in Raipur (16 at map correction and 4 at attestation), 6 in Dhamtari and 26 in Simga, total 63. In addition to this many blocks of land large and small were re-surveyed at map correction and also at attestation in the Raipur Tahsil.

81. I give as an appendix to this report copies of the rules issued for the guidance of patwaris and of Inspectors in map correction work up to the stage of passing of areas and khasra completion. The jamabandi can then at once be written out from the kisan-parchas, Rule 36, and areas entered from the khasra.

Rules 20 to 26 were only in force in the Dhamtari Tahsil. The small reduction in entries in the Drug and Raipur Tahsils, and especially in some circles of the Raipur Tahsil, seemed to indicate that in the Dhamtari Tahsil, where the fields were large, there would be but little saving in grouping fields, and that the old numbering might be retained. The large number of entries which go to a holding cause the decision of land disputes to be a very tedious proceeding. When the numbering is changed, for some time all documents will bear the old number, whilst the patwari papers bear the new numbers. The old number is given in red ink in the new khasra for easy reference, and new numbers can be traced back to old, but the tracing of old to new is more difficult, because they are not in a series but scattered over several hundred pages of the The jamabandi facilitates the search, but it is a tedious process, and khasra. if there has been any carelessness in entry of comparative numbers the comparison takes a very long time. It is obviously to the interest of parties and courts that the old numbering should be retained if possible. It was with this object that Rules 20-26 were framed. The reduction of numbers was of the first importance from every point of view, but, if the saving that could be effected was small, there comes a point when the advantage of a permanent reduction, if small, may be more than outweighed by the temporary inconvenience of changing all the numbers. This point was fixed at 5 per cent; the decision as to re-numbering rested with the Inspector. In the Dhamtari Tahsil, however, the work was, as already stated, of good quality, and there were

Re-numbering.

very few villages in which it was found possible to maintain the old numbers. In the Simga Tahsil it was anticipated that the saving would be still greater, and these Rules 20-26 were cancelled for that tahsil as involving extra work to little or no advantage.

82. Unless vast strides are made towards breaking up the lakhabhata distribution, it should be unnecessary to again alter the numbering for some time to come. The formation of chaks however was not thoroughly carried out in the Drug and Raipur Tahsils, and it would, before the next regular inception of settlement, be advisable to examine 10 or 15 villages in each encle, to judge what scope the present formation of chaks leaves for a further reduction of entries. Those villages should be selected which have a large number of entries and a proportionately small number of holdings. This examination should not be left to patwaris, but should be done by Inspectors, and of the villages examined by Inspectors, one or two in each circle should be checked by the superior staff from beginning to end. The framing of chaks is not as simple as it sounds; it requires the greatest care and attention. If it is found that no further action in this direction is advisable, it will be possible to retain the old numbers, but a word of caution is necessary as regards the procedure prescribed in Section 159 of the Settlement Code, which for facility of reference is now quoted :---

If plural (or bracketted) numbers have become inconveniently numerous, owing either to changes since the survey or to the amalgamation of soil divisions which were wrongly given separate numbers at survey, the Inspectors should draw up proposals for simplifying the map by transferring duplicate numbers to other fields which bear sub-numbers. A subnumber can be cancelled, if its series can be changed without risk of confusion, but a number must not be eliminated unless it can be provided for elsewhere, as there must be no blank numbers in the village series.

So also, if sub-numbers have become inconveniently numerous, proposals should be made for substituting separate numbers for them, obtained either by transfer from amalgamated numbers as above or by adding to the village series of numbers.

Proposed number.	Explanation.
	सन्यमेव जयते
215	216 given to $\frac{21}{3}$; $\frac{21}{1}$ cancelled.
217	$\frac{2}{1}$ cancelled above; $\frac{2}{3}$ and $\frac{2}{4}$ ohanged.
216	See above under No. 215.
396	Added at end of village Sories.
	215 217 216

The proposals should take the following form :---

No changes should be made until this list has been passed by the Settlement Officer. It will then be sent to office, and should be resubmitted when the changes have been effected with a certificate from the Office Superintendent that they run right through both copies of the record as well as the map.

I received my settlement instruction in field work in the Bhandara District, and I well remember that the Settlement Officer and his assistants experienced infinite trouble and difficulty in following out these instructions. The Bhandara District, khalsa portion, contains only 321,000 entries. The entries for the Raipur khalsa are as revised 4,449,000. The difficulty of redistributing bracketted and sub-numbers, where the entries are so numerous, can hardly be thoroughly comprehended by any one who has not attempted it. Map amendment work is not an easy task in this district, but it would be distinctly scorpions instead of whips, if such re-distribution was attempted, and I do not think that anything but failure could result. In this district no re-distribution was attempted, and the procedure was as prescribed in Rules 24, 25 and 26.

83. In the Drug Tahsil the marking of chaks was done on the patwaris' trace by thickening the outer line. In the Raipur Tahsil a pencil trace of the original sheet was sent out and inked up in the field. The pencil-

ling and ink upon pencil makes a very unsightly trace, and renders it difficult to make a sufficient contrast between the inner and outer boundaries. Red ink was tried for outer boundaries, but this experiment led to more mistakes than before, the red ink, curiously enough, failing to fix the attention of the patwari. Mr. Dunne issued traces of cobalt blue for the Dhamtari and Simga Tahsils. This was a great improvement, as all survey that was unaltered was left untouched, and an immense amount of inking up was saved. Chaks were inked round, and the outer boundary was of course quite distinct from the inner divisions of cobalt blue. When preparing the trace in office, inner divisions have been shown by dotted lines so that there is no possibility of confusion. New cultivation was inked up, and at once attracted the attention. The chief objection to this was the crasing of boundaries that had disappeared and bad survey. The cobalt blue can be removed with a wet cloth, and if this is done carefully, the trace is not disfigured, but patwaris were restricted to neatly cutting obliterated boundaries with pencil. Bad survey was ring-fenced and plotted separately and brought on to the trace under the Inspector's supervision. In 1899 the Patwaris were ordered out to famine and had to take their map correction traces with them. It was found in 1901 that the cobalt blue had faded badly. As a temporary expedient for map correction it is excellent and lasts well for one year.

84. Much damage resulted to the traces from their unmanageably large Preservation size and from their being folded up. The traces gave at the creases and traces. portions of the map were entirely spoilt. Large maps are now cut into sheets for which a maximum size has been prescribed, and the patwaris have been supplied with tin cases. The sheets are now rolled up on rollors and kept in these tin cases.

85. It was at first decided sufficient to reconcile present areas with the Areas. survey area in the summarily settled tracts and with the settlement area in the regularly settled tracts. However, at attestation in Drug and at map correction in Raipur, it was found that this was not a safe basis, unless accompanied by a careful eye-check of all fields of any size. The whole of the Drug areas were dealt with at attestation. The inaccuracies of the areas greatly added to the difficulties in Raipur, and a large number of villages had subsequently to be dealt with at attestation. In the Dhamtari Tahsil the patwaris were ordered out half-way through the office season for famine work, and again a large number of villages had to be left over for attestation. The Simga Tahsil areas were all disposed of at map correction. All substantial error has, I trust, now been eliminated, although in many cases it was necessary to pass the villages outside the limit of I per cent variation from the universal theorem area. It was impossible to undertake wholesale re-working at the stage of attestation, and all that could be done was to eliminate substantial errors. With fields small and counted by thousands, a very slight tendency to overwork or underwork produces a serious error, and this cannot be set right without re-working. When there are many fields measuring less than one-tenth of an acre, and a very large number measuring less than one- fifth of an acre, the mere fact that distinction is not carried beyond hundredths of an acre is sufficient to explain a considerable divergency from the universal theorem area. An error of one two-hundredth or 005 of an acro in each of 5,000 fields comes to 25 acres, if the error is always in the same direction, and very few villages measure 2,500 acres whilst many had 5,000 entries.

86. I have montioned the difficulty caused to parties and courts by the work change of numbers. With map correction overlapping attestation and attestation pushed well into the Land Record season, and with a famine every third year, it has not been possible to get any work done that was not indispensable. However, as soon as there is a little breathing time, the patwari ought to prepare simple lists of comparative numbers with the old numbers in serial order and paste one copy in the Sadar misl and one copy in the Patwari misl.

Attestation was not to follow upon map correction in East Simga, and the office work was, therefore, heavier than usual as it included the preparation

51

Work remaining to done.

of

of Sadar misls. Patwaris were called out for famine, and in many cases even the first copy of the jamabandi was not complete. The patwari jamabandis will be completed in the field, but the Sadar record with trace should be prepared as soon as the patwaris can be spared. Careful check of the patwari khasra with the map, and then of the jamabandi with the khasra, will be necessary. The only safe check of the jamabandi is to- make the patwari prepare a skeleton jamabandi from the khasra and compare the totals of holdings. Discrepancies must then come to notice. A skeleton jamabandi for a villago of 2,000 numbers can be prepared in three days. An Assistant Superintendent of Land Records, who has had settlement training in this district can efficiently supervise this work under the supervision of the Superintendent, Land Records.

In three villages—Abhanpur, Naikbandha and Satpara—of the Raipur Tahsil re-survey is necessary.

PART II.

Section II.—Attestation.

S7. Attestation was taken up in the Drug Tahsil in December 1897. It was early seen that the conditions were such that the staff of Inspectors allowed was altogether inadequate for the work to be done. The staff at that time was the same as allowed in ordinary districts, viz., 2 Assistant Settlement Officers and 14 Inspectors. It was doubled during the progress of the field season, and the programme was practically completed. The Raipur Tahsil in 1898-99 was a still heavier task. Twenty Inspectors were sanctioned at the outset, and the staff was doubled at the beginning of the hot weather. The programme could not be completed. The famine of 1899-1900 intervened. In 1900-01 and 1901-02 with a programme equal to only half that of 1898-99, 34 Inspectors and 3 Assistant Settlement officers were allowed from the outset. A large subordinate staff is essential to the punctual and accurate disposal of work in this district.

Procedure in field work.

Staff.

88. The procedure in attestation is described at Sections 99 to 106 of Mr. Carey's Settlement Report. Before a village came up for the inspection of the Settlement Officer, the Assistant Settlement Officer had filled in a printed form showing changes in the proprietary body, the classification of soils at settlement, with present classification by soil and position; the leading figures by which the prosperity or otherwise of a village may be judged, cropped area, old and new fallow, cattle, population, number of tiled houses, irrigated area, tanks and wells, cropping at settlement (the area under each crop for the year of attestation is not available at this stage) and increase or decrease of cultivation and assets. This statement also shows changes in the homefarm area and fluctuations in the rates paid by tenants by classes; the instalments by which revenue is payable at present, and whether considered suitable by the people; the sources of siwai income and the classification of the tonants by caste and condition. The Assistant Settlement Officer also wrote a note dealing briefly with such points as especially called for notice under heads a to r of Mr. Carey's Section 106. In the tabsils taken up later on, the following additional points were also carefully noted :---

- 1. The highest area double-cropped in any previous year.
- 2. The highest area irrigated.
- 3. The highest area sown with wheat if the area classed as Gohari was much in excess of the area actually under wheat.

Information on these points was readily available from the village notebooks, which have been introduced in these provinces, and which are a most valuable aid to estimating the progress of a village.

- 4. Details of all tenants settled since settlement.
- 5. Details of transfers of tenant right.
- 6. Details of nazarana paid by newly-settled tenants or on transfers.
- 7. All claims to hold land free from rent or on reduced rent.
- 8. Damage resulting from fires, which are very frequent.

With regard to head No. 4 the ordinary rate is now very far from showing the competition rent of land. Ordinary land may have been held by ordinary tenants for 20 years at low rates. It may be held by absolute-occupancy or occupancy tenants (superior ordinary) paying very high rates, as a substitute for enhancement on their protected land, or very low rates or *nil* on encroachments. It may be held by lessees of khudkasht from year to year at high rates, and includes high rents on garden land. It is essential to separate out land settled within recent years with tenants as *holdings*, in order to obtain any idea of the real competition rent of land. Even these tenants are often settled on the old customary rents after paying heavy nazranas, and from tenants settled recently it has been the practice to require the incomer to take up the liabilities of the former tenant.

89. The Assistant Settlement Officers keep the Settlement Officer informed of progress in their groups, and, on receiving intimation of the dates of his inspections, warn the malguzars of the same, and a copy of his tour with the names of the villages for inspection day by day is fixed up at the tahsili for the information of malguzars residing at head-quarters. So far as possible villages are got ready in blocks, so that the Settlement Officer's time may not be lost going over ground for which the papers are not ready, and that by comparing the soil classification along the borders of adjoining villages the personal equations of Inspectors in the matter of soil and position may be ascertained and discrepancies eliminated. The notes of the Assistant Settlement Officers are sent in to the Settlement Officer with all the village papers and the vernacular settlement papers.

The most important amongst the latter are-

- The Khewat.—Which gives details of the proprietary body, plot proprietors, and muafidars.
- The Mazarian. Which is an abstract showing the name and caste of each tenant, each holding held by him with the rent, his ploughcattle and debt, both grain and cash, and the classification letter applied to him. Arrears of rents, if any, are also shown separately for each tenant in this statement.
- Comparative statements of sir and khudkasht (home-farm), malik-makbuzas (plot proprietors), and absolute-occupancy tenants.
- Area certificate and area index if the village has not been passed at map correction.
- Siwai statement (miscellaneous income).
- Abstract of rontal arrears for the preceding three years, if any.
- Notes for the wajib-ul-arz.
- List of improvements.
- Dispute list.
- Irrigation list with proposals for exemptions.

The second paper, or mazarian, is most necessary in this district, where the jamabandi covers hundreds of pages and is often in three large volumes. Moreover, by bringing together the rents and areas of all the tenants in a few pages, comparison is rendered very easy, and mistakes are detected, which could not be even guessed at by the most careful check of the khasra, e.g., a holding has been sub-divided amongst sons, but only one of them has gone round with the Inspector and has thought to gain an advantage by recording in his own name fields which fall to the share of his brothers. Unless he can utilize these entries afterwards to oust his brothers, there is no advantage to him in this, but only loss, for his rent will be much enhanced and his fields will remain the same, but nevertheless this is frequently done; or without any such fraudulent intention, the rice land may have been distributed and the non-rice land kept in common but entered up by the Inspector against the brother who accompanies him. This also often occurs. A glance at the mazarian shows that the rents are the same but the areas unequal. The caste shows that they may be related, and enquiry elicits some such explanation as is given above.

The other papers do not call for special remark, but I may mention here that the paucity of entries on the dispute list is the redeeming feature of settlement work in this district. In vory many villages this list is blank. The influence of village opinion is great, and if a decision is given that accords with caste or village custom, it is at once accepted.

I have also been especially fortunate in two of my Assistant Settlement Officers, Messrs. Lakshman Rao and Abdul Haqq; times out of number I have been met by the roply: 'Thore is no dispute now.' This may seem curious considering the description I have had to give of the Chamar, and the fact that he heads the list of tenants numerically. But it has been correctly said: "their respect for authority is almost idolatrous." In spite of their deterioration, this is, with few exceptions, still true, but it is necessary to exclude the Civil Courts from the dofinition of authority. Here, not altogether without reason, they imagine that they are always tricked and Without touching on false documents, there are many cases of cheated. wrong entries in the settlement papers due to the weight of numbers. An unscrupulous malguzar takes advantage of such an entry and wins his case. Nothing but enquiry on the spot could have elicited the truth. The Chamar has a grievance for the rest of his life; when such cases are multiplied, the Chamar takes to disregarding Civil Court decrees, not as a protest against authority; he thinks the sirkar has been tricked also, and has no feeling on that account, unless undue favour has been shown to his opponent in Court, or he himself has not in his opinion been given a full hearing; but he is quite determined that his opponent shall not benefit by his treachery. In their villages most Chamars accept at once and as final a decision, which they know to be just, if it is delivered without hesitation.

Disputes of importance affecting shares of villages and whole villages are frequently referred to panchayats and not taken into Court by all castes. They show great confidence in those whom they respect and esteem, no matter whether of their own or of another caste. It is possible for a Revenue Officer on the spot to arrange many such disputes by selecting a panchayat in consultation with the parties. No matter how bitter they are against each other, they readily accept the names of respectable men, even when proposed by their adversary; the only difficulty is in getting the panchayat to accept the responsibility, and this is not very serious.

The Settlemont Officer inspects as soon as possible after the village papers are ready; the chief object kept in view, in arranging the order in which villages are taken up, is that whole patwari circles should be completed and the patwari set free to go to office.

Siwai -

90. Siwai or miscellaneous income is quite unimportant in the Drug Tahsil. Rs. 2,611-12-0 have been sanctioned as against Rs. 1,712 at the summary settlement. The increase is largely due to the beds of rivers that are not navigable having been made over to malguzars instead of being leased out as formerly by the Tahsildar. Rs. 77 was included in the earlier Assessment Reports as dues from Chamars, but subsequently no amount was taken under this head, as they are known to poison cattle and to destroy them in other ways, and in order that they may have no authorized right to the skins the dues paid by them have not been included in the assets.

Where, therefore, suspicion falls upon them, orders can be issued for the destruction of the skins and carcases without any complaint on the part of the malguzar.

In column 3 of Statement VIII of the General Assessment Statement the figures shown in most cases agree with the amount sanctioned. By oversight the entries made in column 3 were not the actuals at attestation but the average assumed by me on the figures at my disposal. There is undoubtedly a far greater miscellaneous income from bazar dues, grazing, grass and other sources than has been estimated for. This may be inferred from villages under the Court of Wards, where the income cannot be concealed to any great extent, and by applications that I have received from malguzars who have wished me to support their requests to be taken under the Court of Wards. Possibly the latter exaggerate their income from miscellaneous sources, but not to any great extent. However this may be, siwai income must generally remain a matter for pure conjecture, and the Settlement Officer has usually much less to support his conjecture as to miscellaneous income than he has to infer concealment of rents.

If it is not safe to act upon the latter inference to the extent of enhancing the rents up to a fair rental (this would often mean doubling the rental), it would be still less safe to assume siwai income that is not admitted.

Nazarana has not been included in miscellaneous receipts. At the present time such nazaranas often only balance the losses due from the tenant absconding or surrendering; and in good seasons there will be fewer transactions on which nazarana can be taken; but the figures already quoted in Part I, Section V, of this Report, show what very large sums are sometimes received. Where nazarana is a substitute for rental enhancement, or for taking a fair rent, it ought to be included in assets, but in that case it will certainly be concealed, even where now admitted. The only remedy for this state of affairs is the fixation of a full rental as soon as possible.

When the rent is full, the purchaser will obviously not consent to pay such heavy nazaranas.

Section III.-Assessment.

The soil unit system of assessment has been frequently described. System. **91**. Land is thrown into classes according to its merits and demerits. The valuation of each class is represented by a certain factor, but there may be many more factors than classes, because the nomenclature of the people is retained; thus kanhar dadha and dorsa gohari were each valued at 16 and constituted two separate factors but only one class, and in the table on page 86 of Mr. Carey's Settlement Report there are 39 factors but only 16 classes. Each soil and position then is represented by so many soil units of which the factor is the measure. By resolving the area which is supposed to be paying rent into its units and dividing into the rental which is supposed to be paid on that area, an incidence is obtained which is termed the all-round incidence of the village. By resolving the rent-paying area of a group of villages into its units, and dividing into the rental paid on that area, an incidence is obtained which is termed the group incidence. The group incidence is then varied in accordance with the reasonings that prevail in all settlement work, but in practice may not be raised more than 35 per cent., or, except for special reasons, above the all-round ordinary incidence, and the revised incidence is now called the standard for the group. If the village incidences are higher than the standard they are not much interfered with; if they are lower, they are raised towards it in accordance with limits fixed on general reasoning common to all settlement work. It is claimed as an advantage for this system that it has been found possible to value an acre of land in 5,412 different ways. This claim is sufficient to make a young Settlement Officer feel nervous. For it would appear to imply that he is expected to distinguish between an acre of land which should be valued at 5,412, and another acre of land which should be valued at 5,4 1; that should he be so unfortunate as to value at 5,410 an acre of land whose real valuation should be 5,400, he will be guilty of grave ignorance of his duties.

This, however, is not the case. The Settlement Officer values land according to the number of classes (not factors) he frames, and for the rest is controlled by group and village rates compounded from an amalgam of fair incidences, privileged incidences and concealed incidences, which often give no approximation to a fair standard. Village incidences are often quite misleading because of large areas held without rent, and the group incidences are affected, but to a less extent, by this cause.

I can see no necessity for attempting to value an acre in 5,412 different wave. If the rental were so high that such minute distinctions were necessary, any further interference would be unsafe. Let the soil valuation be made as accurately as possible, and the standard valuations fixed; these valuations should not be varied except for well-defined differences of climate, communications, markets or husbandry. To fix the standard, cases where high rents have been paid for years may be examined. If they are not found to have been attended with any deterioration and the villages in which they are paid are in good condition, it should be assumed, in the absence of any serious suspicion to the contrary, that the incidences so obtained are easily payable and may serve as standards or the incidence of competition rents may be taken as a standard, whichever is the lower. It may of course be impossible to approach these standards in many villages (the maximum per saltum enhancement permissible would be taken). but there would be no sacrifice of legitimate enhancement, as there is in very many villages under the present system of selecting group standards, and the Settlement Officer would be saved the labour of three-fourths of his rate proposing. The soil unit basis is essential to the valuation of land, but the system ontails a great deal of labour, and unnecessary labour should as far as possible be curtailed.

There are two methods of assessment possible—working from aggregate to detail and working from detail to aggregate. In these provinces the second system is followed. It is undoubtedly necessary that the Government of India should, before the inception of proceedings, be given a general idea as to the probable result, but it is not necessary to try and secure absolute agreement between result and forecast. The Settlement Officer is permitted to explain divergencies from anticipation, but group and village all-round incidences as guides to rates seem to have been devised to compel agreement with the forecast. This procedure confuses the two methods of assessment. When a Settlement Officer is told to apply a standard of 12 annas to 30,000 or 40,000 rents varying from nil to Rs. 3 per acre, details not known, he experiences no little difficulty in calculating the probable result. When the case is not stated so precisely, and he is told to apply a certain ratio to other ratios of which little is known, the question is still more difficult. But why try and help him with misleading Proceeding from details, he will gradually answer the question, and guides. to bind him by group incidences suggests the school device of looking up the answer before doing the sum, and the awful results of having picked out the wrong answer and squared one's figures to it. The group all-round incidence in this district will for many years give a wrong answer. If accepted as a guide, much of the enhancement that may fairly be imposed will be forfeited.

Procedure.

92. Directly the patwari can be sent into office, he is set to work to compare the khasra and soil list with the map of each village number by number. His map is then sent into the tracing office and the patwari then enters soils into the khasra and compares the jamabandi with the khasra. After this comparison has been effected, he prepares fair copies of the khasra and jamabandi, and these are handed over to the English Office.

A full detail of the different stages of work in the Hindi Office with the standard outturns fixed is given as an appendix to this report. Only the barest outlines are given above, and they give very little idea of the amount of work that has to be got through.

Rule XLII of the patwari rules requires that two traces shall be supplied to the patwari—one for use and one for record. Thus three copies of every trace have to be prepared. Owing to pressure of work and dislocation due to famines, only one trace has been prepared for the patwari, but where the attestation or map correction trace is in sufficiently good condition, this also has been issued for present use. The preparation of second traces should be taken up by the Superintendent, Land Records, as soon as possible.

The tracing completed, sadar and patwari copy, covers 7,828,000 khasra numbers. That is nearly eight million khasra numbers and a considerably larger number of field divisions. Most of this work has been done by contractors at fixed rates. The cost has been Rs. 6,836. At the contract rate of Rs. 2.8.0 per 1,000 entries, the cost would have been Rs. 19,570, and the saving is therefore Rs. 12,734.

93. The jamabandi with the fardzamin (or statement of the soil classi-Chithe and khationi. fication field by field) is given to a contractor who is supplied with a form containing double as many columns as there are separate soils and positions (not classes). Against the home-farm (sir and khudkasht) and every tenant according to rights he enters the number of his fields in the odd columns and the area under each separate soil and position in its appropriate column bearing an even number.

This form when completed and totalled by holdings gives the different areas under each soil and position in every holding, the total by holdings gives the area under each soil and position for each class of holding, and the grand total gives the different areas under each soil and position for the whole village. It is called the chitha.

When the chitha is complete, it is taken by a checker and locked up. The patwari is meanwhile going through the check and fairing process with the other villages of his circle. Theoretically when he has completed his check and fairing, he goes to the English Office and taking the khasra of his first village fills up a form called the khationi, which has one column corresponding to every soil and position, and enters the fields with soils from the khasra distinguishing them only by rights.

This form when completed gives the area under each soil and position for each right, and the totals give the total area in the village under each soil and position. The checker takes this form also and compares it with the chitha, which he has kept under lock and key, and marks all discrepant totals.

For the Drug Tahsil there were 86 soils and positions, which necessitated 86 columns in the khationi and 172 columns in the chitha. With the large number of entries per village, insufficient accommodation and bad light, discrepancies were found in more than half the totals, and the reconciliation thereof took longer than the preparation of the forms (chitha and khationi). It was found that many mistakes were due to the khasra and jamabandi \mathbf{not} agreeing. In order to rectify this, the Inspectors of the Hindi Office were made responsible for the agreement of every entry in the khasra and jamabandi. That is to say, they were ordered to check 10 per cent. of the entries, and if mistakes were found, to require the patwari to again make comparison from beginning to end. Progress became very slow, and mistakes still came through to the English Office; it was then ordered that the patwari should prepare a skeleton jamabandi from his khasra. In this way exact agreement was secured in the Hindi Office. Mistakes due to bad light and want of accommodation were reduced by putting the contractors and patwaris under canvas towards the close of the rains, but with such a mass of numbers to deal with it was impossible to eliminate error altogether, and the search even for one mistake often took hours. The form of the khationi was then altered and the patwari was given his khationi in the form of a skeleton jamabandi, e. g.-

S ir Khudkasht	•••	240 370	fields.
	y &c. &c.	54 17	37 29

His khationi was then totalled by separate holdings, and where the search for error used to spread over perhaps 1,500 or more entries, it was now confined to say 50 entries for a tenant holding and 300 or 400 for sir and khudkasht.

In this way the agreement of chitha and khationi was finally effected.

It was said above that theoretically the patwari prepares the khationis for his circle. In practice he has to have assistance to complete even the fairing of his own records punctually, and patwaris of other tahsils are called in for khationi work, and also to assist in fairing of records and in making patwari copies of the maps. With work in arrears in the Drug and Raipur Tahsils, staff 143 and 174=317 patwaris, all the patwaris of Simga and Dhamtari had to be called in, total 620, and adding contractors for chitha and contractors for tracing and the staff of Inspectors, Checkers, Clerks and Readers, accommodation had to be found for some 800 men.

94. The cross check of the chitha and khationi ensures absolute agreement between the jamabandi and the khasra and between the khasra and the fardzamin. I was directed to try whether the khationi could not be dispensed with, the chitha being prepared from the khasra and jamabandi jointly, and then compared entry by entry with the khasra and jamabandi by a superior official. On giving this method a trial, it was found that a very large staff of superior officials would be required to carry out this check, and that the automatic check being dispensed with, there was no absolute guarantee of agreement between the khasra and jamabandi. No matter how diligent, trustworthy and careful a man may be, in dealing with a vast mass of numbers against time, slips will aways occur. In my opinion there is no alternative to the procedure indicated in paragraph 93 supra for ensuring absolute accuracy.

Ryotwari abstract.

95. When agreement has been effected between the chitha and khationi the area under each soil and position in each holding is known. This information is set out in an English Register called the Ryotwari abstract. In the meantime the Settlement Officer has submitted his preliminary report for the tahsil. This report contains a general description of the agricultural condition of the tahsil, with a forceast of the probable result of assessment. This is Part 1 of the report. Part II contains his proposals for the factors suitable to each soil and position.

It is not clear to me why Part II or the factor report should be delayed till Part I is ready. Part I ought not to be written till the Settlement Officer has inspected the whole talkil. It cannot, therefore, be submitted till the rains, and if the field programme of the Settlement Officer has not by then been completed, it ought not to be submitted till he completes it in the following cold weather. But Part II should always be submitted, so that the scale of factors may be sanctioned in time for the office season; otherwise a whole year is lost. I have suggested elsewhere that the Settlement Officer ought not to be desired or permitted to vary the existing scale during his first season. The classification of land should be based on tried experience. If that view were accepted, the Settlement Officer would in his first season use the existing scale and would be forming his own ideas, which he could correct during the rains to some extent and by experiments directly the rains were over. After experiments in the sihari and unhari (rains and cold weather) cropping he would then submit his proposals for any revision of the scale contemplated, and he able to obtain sanction in time for the second office season. The classification of land is a distinct branch of work and the present procedure causes delay and loss of revenue.

However that may be when sanction to the factors is received, the 96. Rent-rate Reports. factors are applied to the soils and positions, the soil units of each holding are deduced, and by dividing the soil units of the different classes into the rent paid, class incidences are obtained. When these incidences are available for a group of villages, the group class incidences are calculated, and the Settlement Officer submits a Rent-rate Report, which gives a description of the agricultural condition of the group with proposals for assessment. This report is accompanied by separate notes on each village describing the condition of the tenants and proposing a village rate. A standard rate based on the group incidences is first selected, and regard has to be paid to this. If this standard were any index to the rent-paying capacity of the group, it would be necessary to reduce rents wherever they greatly exceeded the standard. In this tahsil, however, rents have not been reduced, when they have been double and treble the standard, because they are paid with ease. Theoretically the standard rate being fixed on general considerations should control the village rates. In

practico it is found that village rates are allowed to control the standard. The Settlement Officer can alter the answer to the sum proposed to him. This is convenient, if not very logical, and the only objection I raise is that the Settlement Officer is not allowed to alter the answer sufficiently to produce the best results.

In this tahsil, however, no difficulty was experienced in proposing rates. The maximum per saltum enhancement was proposed and was applied to all villages whose condition justified such treatment. Reasons were given for disregarding the standard, which were sometimes accepted and sometimes the rates were modified. When the second famine (1900) intervened, the rates were reduced to the minimum admissible, sometimes below the all-round village incidence, so that only the lowest rents might be touched.

The work of the statistical branch however was very laborious. Areas, rents and rent-rates had to be entered and + or - percentages had to be calculated not only as between last settlement and attestation (this is usual) but at Mr. Hewitt's settlement, at Khan Bahadar Aulad Hussain's settlement, at attestation, and finally in some cases at revision.

97. When the village rates are sanctioned, they are applied to the soil Reat proposal. units holding by holding, and rents are arrived at which are called the deduced rents, and a deduced valuation is obtained for non-rent paying land.

The Settlement Officer and his Assistants then propose rents having re-gard to the condition of the tenant and the ratio of his present rent to his deduced rent. This operation is very tedious and exhausting, and especially so under famine conditions, when it is necessary as it were to keep one's finger on the pulse of the tenant up to the very day of propos-ing his new rent. Thus although the Drug Tahsil had been attested in 1898 and revised in 1901, when rent proposing was taken up in the rains of 1901, the amount of seed sown in June and July 1901 was ascertained before making any enhancement. It was fortunately unnecessary to do this in every case, as many rents were left altogether untouched. However the present and deduced vent of every holding had to be scrutinized, and dealing thus with 35,000 rents puts no small strain on the Settlement Officer and his Assistants. The Settlement Officer having at the same time to submit rent-rate reports, assessment reports and annual reports, besides miscellancous work and supervision; and the Assistants having to supervise the work and accounts of 800 patwaris and contractors, &c.

The difficulty of this work was further increased by the fact that changes at revision (1901) had to be taken into account, and in addition to the ryotwari abstract there was also an appendix showing these changes. A tenant with hand in all three rights in a village of four mahals, holding land in all, and a little more in the appendix, is an extreme case; all these broken bits have to be pieced together to arrive at an equitable whole. But the number of cases in which it was not sufficient merely to look at a single rent and deduced rent was very large.

98. Statement VII of the General Assessment Statement gives the payments of each class of tenants at Mr. Hewitt's settlement, the summary settlement, attestation, at revision, as proposed, as sanctioned, and as announced :---

		TENANTS,								
	Malik- makbuzas.	Absolute- occupancy.	Occupancy.	Ordinary.	Total.					
1	2	3	4	5	6					
	Rs.	Rs.	Rs.	Rs.	Rs.					
1. At Mr. Hewitt's settlement	1,482 0 0	42,818 0 0	17,254 0 0	1,03,820 0 0	1,68,892 0 0					
2. Incidence per sere	055	069	083	092	084					
3. At summary settlement	1,544 0 0	42,974 0 0	1,15,114 0 0	87,725 O C	2,45,813 0 0					
4. Incidence per asre	062	085	095	0101	095					
5. At attestation	1,460 0 0	41,403 0 0	1,16,100 0 0	1,05,238 0 0	2,62,741 0 0					

					TERANIS.								
			Malik- makbuzas,			Absolute- Occupancy.		Occupancy.		Ordinary.	Total.		
	1	 	2	<u> </u>	3			4		5	6		
-		 	Rs.		Re			Rs.		Rs.	Rs.		
6.	Incidence per acre	 	0	51	1 0	8	4	09	7	0 10 3	0 9	7	
7.	At revision	 	1,461	00	40,191	0	0	1,03,552 0	0	1,02 ,0 43 0 0	2,45,786 0	0	
8.	Incidence per acre	 	0	5 11	0	8	4	0 9	5	0 10 3	0 9	6	
9.	As proposed	 	1,747	00	46,525	0	0	1,15,014 0	0	1,09,346 0 0	2,70,915 0	0	
10.	Incidence per acre	 	0	71	a	9	8	0 10	6	0 10 11	0 10	6	
11.	As sanctioned	 	1,725	0 0	46,507	0	0	1,14,750 0	0	1,09,179 0 0	2,70,436 0	0	
12.	Incidence per aere	 	0	70	0	9	8	0 10	5	0 10 11	0 10	5	
13.	As announced	 	1,732	0 0	46,369	0	0	1,13,620 0	0	1,08,882 0 0	2,68,871 0	0	

This table is, however, incomplete without some idea of the areas held by each class :--

	HRLD BY MALGUZABS.		HBLD BY MALIK-MUK- BUZAS.		REVENUE-		HELD BY AB- SOLUTE-OCCU- PANCY TEN- ANTS.				erior elass in	HBLD BY ORDI- NABY THNANTS		B. VILBGED TENANTS.		to agree with).		
	As eir.	Other than sir.	Total.	Area of total leased.	Number of holdings.	Area.	Number of holdings.	Area.	Number of holdings.	Arcs.	Number of holdings.	Area.	Held by tenants of superior class ordinary tenant right.	Number of holdings.	Area.	As grant from male guzar.	In lieu of service.	Total occupied area (to agree Column 6 of Table V).
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
At attestation	A cres. 112,841	A cres. 37,401	Acres. 150,245	А стев. 7,933	ł	Acres. 3,966	Acres. 5	Acres. 86	C. COLLE	Acres. 79,402		Acres. 194,278	Астов. 40,783	Acres. 12,064	Acres. 123,067	Acres. 4,620	()	Acres. 598,739
Percentage on total occupied area of areas in columns 4, 11, 13, and 16.			р. с. 25			p. c. 1	ि स	आह यमेव	<u>ः</u> । जय	p. c. 13		p. e. 32		р. с. 27				
At revision	112,311	€0,320	172,031	7,893	686	3,945	5	86	5,698	76,973	12,127	175,706	43,070	10,721	116,706	4,642	2,219	595,978
Percentage on total occupied area of areas in columns 4, 11, 13 and 16.	•••		p. c. 29			p. c. 1			·•	р. с. 13	,	p. c. 29		p. e. 27		•••-		
Compare entries of last settlement for columns 4, 11, 13 and 16.	1		125,454			4,008		124		82,032		194,984	***		139,465	5,58	3	551,665
Compare entries of Mr. Hewitt's settlement.			118,209			4,367		13 Ż		101,107		33,391	1.,		190,511	3,1	540	451,357

Table VI shows that the occupancy land at the summary settlement to a large extent coincided with the ordinary land of Mr. Hewitt's settlement. The occupancy acreage rate at revision therefore showed complete stagnation, having only risen from 9 annas, an amalgam of the occupancy and ordinary rates at Mr. Hewitt's settlement, to 9 annas 5 pies or by $4\frac{1}{2}$ per cent. The absoluteoccupancy rate had been enhanced at the summary settlement, but was still low at revision, and the ordinary rate was being paid on land quite other than that held by ordinary tenants at Mr. Hewitt's settlement.

The enhancement now effected is-

		Per cent.	Incidence.
Malik-makbuzas	•••	18	·61
Absolute occupancy		16	·66
Occupancy		11	•77
Ordinary		7	·86
All-round tenants		10	.78

The malik-mak'buzas are a small unimportant class, holding groves for the most part. Much of the sum shown against them is not collected at all.

The absolute-occupancy class still pay at an incidence far below that of the occupancy and ordinary classes.

The occupancy enhancement is due to the levelling up of low-paying tenants; those enhanced still pay much below their fellows, that is below '77. Part of this enhancement is due to fixation.

The ordinary enhancement includes very little direct enhancement of true ordinary tenants. It is largely due to fixation on without rent areas and to taking some approach to a fair rental on low-paying holdings held *benami* by representatives of the malguzar.

Full details are given in the group assessment reports and assessment notes.

The total enhancement of rents amounts to Rs. 23,085; of this sum Rs. 4,t 03-12-0 was due to fixation on land held without rent distributed as follows :—

				Rs.	з.	p.	
Absolute-occu _I	ancy		•••	1	2	0	
Occupancy	•••	•••		1,167	7	0	
Ordinary	•••	•••		3,435	3	0	

Rent reduction has only been made in two villages—Ruabandha and Marra. In the former the rent-rate had been pushed up comparatively high, incidence 3.06. With a Rajput Malguzar and Chamar tenants the village was prostrated by the famines. In the latter, heavy rent concealment was detected, and the Commissioner of Settlements ordered the rents to be reduced. There are a few other scattered cases of reduction, but mostly only apparent. In 37 villages no rents were enhanced at all, and in many others the enhancement was only nominal.

99. The proposed rents are next totalled, the valuation of the homefarm and miscellaneous income are added in, an assessment note is written for each village in which proposals for the revision of the revenue are made, and a group assessment report is submitted.

For the Patan, Ranchirai and Dhamda groups rent-rate reports were submitted in 1899. The rates in these reports were not revised, but the following limitations were observed with regard to tenants :---

- (1) No enhancement to be made on any D or E tenants, even though that enhancement be merely rent fixation on encroachments.
- (2) C tenants not to be enhanced more than one-eighth.
- (3) A and B tenants not to be enhanced more than one-third.
- (4) Ordinary tenants not to be enhanced.

To these limitations I made the following modifications :---

- To No. 1.—If a D or E class tenant holds a large area and has also encroached on a considerable area, I have fixed a moderate rent on the encroachment.
- To No. 2.—If the rent of a C tenant is abnormally low, I have enhanced up to one-sixth, or if his actual payment is also very small, up to one-fourth.
- To No. 3.—The one-third limit has occasionally been exceeded when the tenant held on a very low favoured rent, or by reason of rent fixation, especially in the case of A class tenants, and in villages where rent concealment is strongly suspected.

To No. 4.—Ordinary tenants holding from before the summary settlement have been enhanced, especially in the case of Chamars, who are very apt to misinterpret undue leniency. Wealthy purchasers holding on the old customary rent have been enhanced.

The valuation of the home-farm was, however, modified, whenever the rate would have been modified, if these Rent-rate Reports had been revised. A rather higher valuation was taken in Dhamda, because of harsh treatment of tenants by the malguzar and refusal to co-operate with Government in the famine of 1897. In all the other groups owing, as I have already mentioned, to the village rates having been cut down to the all-round incidence, the homefarm valuation gave an incidence equal to that of the occupancy land and well below that of the ordinary land; details below :---

Serial	Name of assessment		Incidence	PER ACRE.	SOIL UNIT INCIDENCE.				
No.	group.	Absolute- occupancy.	Occupancy.	Ordinary.	Home- farm,	Absolute occupancy.	Oceu- pancy.	Ordi- nary.	Home- farm,
1	2	3	4	5	6	7			
1 2 8 4 5 6 7 8	Dhamda Nankatti Drug Bhilai Patan Ramchirai Arjunda Pinkapar	Ba. a . p . 0 9 6 0 8 11 0 9 9 0 9 4 0 11 6 0 10 9 0 9 3 0 9 6	0 10 3 0 9 5 0 10 9 0 9 9 0 13 4 0 12 3 0 9 8 0 10 5	Rs. a. p 6 10 6 0 9 10 0 11 1 0 10 9 0 14 11 0 18 3 0 9 11 0 11 4	Rs. a. p. 0 11 11 0 10 5 0 11 1 0 10 6 0 14 4 0 13 4 0 10 0 0 10 11	075 070 077 079 078 080 062 066	0.83 0.77 0.75 0.91 0.97 0.94 0.67 0.74	0.91 0.85 0.85 1.05 0.99 1.06 0.72 0.83	0.95 0.80 0.76 0.90 0.97 1.04 0.69 0.74
9	Bhandera Total	091	099	0 10 8	0 11 5	0:59 0:66	0.64	0.20 	0.65

100. The total enhancement effected in rents as announced amounts to Rs. 23,085. The total enhancement in revenue as announced amounted to Rs. 32,805. So far as possible, at a time of stress such as this, I have endeavoured to take no more cash enhancement from deserving malguzars than is covered by the rental enhancement. Where there has been much rental enhancement by the malguzar, or concealment of rents has been discovered, or there has been extension of cultivation, it has, however, been impossible to attain this object. It must also be remembered that the malguzars have added 38 per cent, to their home-farm, and that the possibility of meeting revenue enhancement by cash enhancement of rents has to this extent been minimized.

The enhancement by groups and the actual cash additions to assets and revenue, with percentages taken at settlement and now, are shown below:---

		PEIOR TO REVISION.		A # 31	4188D.	Actual in- crease of			Per- centage	Por-
Serial No.	Name of assess- mont group.	Kamil-jama.	Net revenue roulizable.	Kamil-jama as sanctioned by Chief Com- missioner aud announced.	realizable	revised net realizable	In- Fremue per Cont.	Addition to cash assets.	of assets taken at settle- ment.	of
1 3 4 6 7 8 9	Dhamda Naukatti Drug Bhliai Patan Ranohirai Arjunda Pinkapar Bhandera	21,414 6 3 20,220 12 7 20,527 0 2 14,984 0 0 14,030 0 0	R5. a. p. 21,122 6 7 19,860 0 3 19,600 13 7 20,527 0 2 14,508 0 0 14,020 0 0 21,618 6 0 14,179 0 0 22,106 0 0	Rs. 2, p. 27,676 0 0 24,375 0 0 25,550 0 0 20,185 0 0 17,670 0 0 18,113 0 0 24,770 0 0	Rs. p. 27,637 8 0 22,760 0 0 23,075 0 0 24,190 0 0 19,625 0 0 17,670 0 0 24,615 0 0 15,868 0 0 24,770 0 0	Rs. a, p. 6,515 1 5 2,909 15 9 3,174 3 5 3,662 18 10 5,037 0 0 3,650 0 0 3,905 10 0 1,669 0 0 2,664 0 0	\$1 15 16 18 34 26 14 12 12	Ba. a. p. 3 ,023 3 0 2 ,781 6 8 1 ,706 3 8 3 ,604 5 8 3 ,761 11 10 1 ,693 1 8 2 ,905 7 9 2 ,037 15 0 2 ,745 5 10	50 49 53 49 50 51 56 56 60	50 61 69 51 50 53 54 54
	Total	1,73,313 1 7	1,67,922 9 7	2,05,118 0 0	2,00,210 8 0	32,297 14 5	30	23,356 12 11	52	61

The amount of jama not realizable owing to revenue-free grants was Rs. 4,390-8-0 prior to revision and is now Rs. 4,907-8-0.

Patan and Ranchirai were in good condition. Dhamda was in fair condition owing to its bumper wheat crop in 1897. The malguzars of Dhamda are mostly wealthy, but exert themselves to get rid of their tenants. And in several villages of this group there had been a large spontaneous increase of assets. In these three groups a larger enhancement was taken. In Pinkapar and Bhandera only 12 per cent. was taken. The malguzars are not wealthy, and there had been no room for extension of cultivation. In 8 mahals the revenue was reduced; in 74 the revenue was not interfered with, and in 32 the enhancement was less than 5 per cent. In 37 mahals the revenue was enhanced by 50 per cent. or more. So large an enhancement was only taken in response to the discovery of concealment or other causes leading to a very large spontaneous increase in assets.

101. A sum of Rs. 340-2-0 was exempted on account of improvements; Exemption. 491 48 acres of grove land were exempted from assessment. The poor soils were very lightly rated, and in addition to this in bhata and patpar-kachhar non-rice land new fallow was exempted from assessment up to one-third of the area of these soils included in a holding.

102. Three assessment reports were not submitted till January 1902 Announcement. and announcement was consequently very late, and was not completed till after not only the first but also the second instalment of rent had fallen due. This was unavoidable as orders for the assessment of the Drug Tahsil were not received till August 1901.

In Patan and Rauchirai the malguzars complained that well-to-do tenants had not been enhanced. The ront-rates had not been reduced in these two groups.

I have only heard of two appeals against the revenue assessment so far. One by the wealthy Ramchandra Dau Bania has been rejected. He was leniently assessed, but in his grounds of appeal he totally omitted from the assets large payments by malik-makbuzas, on which Government is entitled to take up to 90 per cent. The second appeal has only just reached me. It is by ono Sitaram, an *ex*-District Revenue Inspector, mentioned at Section 101 of Mr. Carey's Settlement Report. He was dismissed for dishonesty. He then purchased a 4-anna share in a large village Nawagaon, which was partitioned off and called Parsada. He got nearly all the kanhar in the village, whilst the 12-anna share (Nawagaon) consisted of bhata, matasi and dorsa. He pushed up ronts, and accordingly the revenue now proposed is proportionately greater on his village Parsada than on Nawagaon.

Nothing can be inferred from his application as regards soils, for it is of course to his interest to decry kanhar, but it is a practical proof of the estimate which is placed locally on the soils that he should have been allowed a full fourth of the area all kanhar as a fair 4-anna share.

Three appeals have been made by tenants which have been rejected.

103. Very few villages are managed by thekadars or lessees in this tahsil, Thekadara and only one was found entitled to the protected status. This was in mauza Karmari of the Pinkapar group. The proprietor is Baldeo Singh of Khairagarh. He was represented by a local pleader, and agreed to the conferral of the protected status, and suitable arrangements were made by increasing the theka-jama and taking a low fraction towards revenue to provide for the interests of the superior proprietor.

104. Cultivators do not place so high a value on black soil as has been ^{Deduced rents} and done by the Settlement Department. Over a long series of years, it is no doubt an advantage to have at any rate a fair proportion of light soil, which on an average yields a better rice crop, but in a series of years like the present, black soil certainly is superior if only because the failure of cold weather crops has not equalled that of the rain cropping. On the cultivators' side, however, it must be remembered that large fallow areas in light soil villages signify much loss deterioration than very much smaller fallow areas in black soil villages, and that the extra deterioration found in light soil villages has been largely contributed to by the predominance of the Chamar tenantry on light soil tracts. Rent-rates indicate very little difference between light soil and black soil villages, unless there are very large spreads of bhata-tikra (non-rice) land on the margin of cultivation. Thus with the scale of factors in use the discrepancy in the resulting incidences is most marked, especially in the Dhamda and Nankatti groups. All light soil villages have high and all good black soil villages have abnormally low incidences. If the excellent kanhar of the Dhamda group had been fully valued, *i. e.*, if the factor in that group had been raised above the kanhar factor in other groups, the discrepancy would have been still more striking.

This being the case and in view of the doubts I have expressed about the suitability of the soil classification, when discussing soils in Part I of this report, it might be supposed that even if lakhabata continued firmly established, its effect would not be apparent on the deduced rents. But because there are discrepancies, as between villages, there need not be discrepancies between holdings, and if a classification is not suitable in its terminology, it is yet possible to avoid inequality of assessment, by regarding those terms as mere classes and following the statements of the people. If the classification is fairly in accord with the views of the people, that is, if their principles of distribution have to some extent been ascertained and followed, the effect will be apparent in the deduced rents, which should show marked equality.

If there is marked equality in the deduced rents, this will be an indication that the lakhabata distribution is still strongly established and that the classification as effected has been fairly suitable. Equality of deduced rents would not result with lakhabata and a faulty classification; and could not result under any other conditions than equality of holdings and a soil valuation in accordance with the ideas of the people.

	Name of village.				for	teet	ing	equ	ado sulit acre	y	Number of deduced rents that fall with the limits.	Агев.	Number of deduced rents out- sido the limits.	Area.
				Rs.	8.	p.		Rs.	а.	p.				
Matang	•••			0	10	8	to	0	13	8	41	514	2	9
Santra	•••	•••	•••	0	10	8	to	0	14	8	76	1,005	8	11
Soram	•••	***	•••	0	10	8	to	0	14	8	50	801	7	48
Dhuma	•••		•••	0	10	0	to	0	15	0	26	352	3	46
Kashi		-••		1	0	0	to	1	5	4	41	526	2	10
		Total	•••				•••	-			234	3,198	17	119

I have therefore examined a number of villages from this point of view with the following results :--

In these 5 villages in 234 holdings measuring on an average 14 acres each, the incidence of the deduced rents per acre falls between the limits indicated and 17 measuring 7 acres each fall outside. Of these 17 holdings only 3 exceed 10 acres and the other 14 average 5 acres each. In very small holdings the same equality cannot always be observed either in lakhabata or in our classification. One field of half an acre on the border of dorsa I and kanhar may upset the result. Of the 3 holdings which, falling outside the limits, measure more than 10 acres, 2 are found in Dhuma, a village which was nearly all fallow at attestation owing to a feud between the Brahmin purchaser and Chamar tenants. The lakhabata distribution may have been upset by these quarrels, and the classing in fallow villages is never so accurate, because when left fallow the quality of soil is more difficult to determine and much underclassing results.

The same villages with narrower limits, viz:-

				Rs. a.	р.		Rs. a.	р.
Matang			•••	0 11	0	to	0 13	0
Santra	· • •	•••	• • •	0 12	0	to	014	0
Soram	•••	•••	•••	0 11	8	to	0 13	8
Dhuma	.:.	·		0 11	8	to	0 13	8
Kashi	•••		•••	1 0	0	to	1 3	4

give the following results; 60 holdings measuring 493 acres average 8 acres fall without these limits. Of these 60 holdings 19 measure more than 10 acres. The greatest uniformity is found in Matang where only 10 out of 53 holdings fall outside these fairly narrow limits, and all of them are small averaging only 5 acres each.

11 other villages examined by me give similar results, but 13 more show no such uniformity. Of these 13, 10 are villages similar to Dhuma, in which there have been quarrels and many changes due to famine. 16 villages therefore give evidence of uniformity of distribution and appropriate classification, whilst in 13 either the lakhabata distribution has been broken up or the classification is faulty.

105. I have examined the statistics of East Simga and the Pallari and Abstement. Rohasi groups of the Raipur Tahsil in accordance with instructions received, and submitted proposals for an abatement of revenue amounting to Rs. 4,650 in 68 out of 550 villages. In view of the renewed failure of crops, revenue will be largely suspended or remitted in these tracts, and it is probable that my proposals will have to be re-considered and extended.

106. In the other tracts attested in 1902 settlement has been stayed, but Redistribution of in the jungly pargana of Sanjari in the Dhamtari Tahsil the incidence of rovenue had become unequal, and has now been redistributed after a summary reinspection in January 1903. The revenue which will now be announced is practically unaltered, *i.e.*, Rs. 5,195 against Rs. 5,172-12-0. There would have been a reduction, but that the siwai income in many villages was much under valued at the summary settlement. Some of these villages are held by wealthy Marwaris purely for their siwai income.

107.It is depressing to persuade only through failure, and I cannot look Balance of work to be done back with any satisfaction on the first two years I have spent on this settlement. The one point that is uppermost in my mind is to make things easier for the future, and especially for the subordinate staff employed. Both in the field season and office season when things were going wrong, the Statistical Superintendent, Checkers, Readers and Inspectors have had to work night and day. The patwaris have had to be kept at work from 10 to 6, Sundays and holidays, as well as ordinary working days, and it has raroly been possible during this time to allow any of the officials leave except on sick certificate. Measures have been taken to improve the patwari staff. This will be very beneficial. Other points on which I have laid especial stress are the necessity for a large staff of Inspectors in this district, and for simplifying the office work by throwing soils and positions into classes. But there can be no sovereign remedy that will do away with the work entailed by the mass of numbers involved. It can be mitigated. " it is understood and modified in every way feasible.

Section IV.-Matters incidental to assessment.

The Land Becord staff.

^d 108. In 1897 the patwari staff numbered 709 under 27 Inspectors distributed as follows :---

Khalsa 620. Zamindaris 89.

In anticipation of the inception of settlement operations in the zamindaris, an extra 30 mon were sanctioned in 1898. Owing to shortness of funds provision could not be made for a larger number. One extra Inspector was also sanctioned to control this addition to the staff.

One Superintendent of Land Records with one assistant controlled this large staff. The patwari staff was badly paid and in many cases the work expected from a patwari was more than he could perform.

Improvement was first considered in 1899, but the famine of 1900 intervening there was no longer any possibility of providing the necessary funds, and this question remained more or less in abeyance, except for some further partial proposals by myself, which were limited by the impossibility of providing funds.

			19-415-34BA	2222-2		(C. 8.
On R	ls. 9	per mensem			•••	 300
11	10	1)	S. S. BRAS		•••	 250
11	11	1)	NO GEORGE	949 .		 150
) †	12	,,	4.00			 100

A revised halkabandi has been framed and patwaris have been posted to the revised circles. In the open country the object kept in view was that no patwari should have to deal with a number of entries much in excess of 10,000. In the jungly tracts the test by khasra entries only is not suitable, and regard was had to the total area of circles, the cultivated area, the amount of work to be done in villages, where it has not as yet been deemed worthwhile to effect survey, new survey and the distances to be travelled. This last point is not of course solely dependent on the area of circles, as blocks of jungle sometimes intervene.

Inspectors' circles have also been re-arranged and the necessary appointments made.

The Assistant Superintendents have been, at any rate temporarily, attached one to each tahsil.

These arrangements have not yet been reported for sanction, because the case cannot be fully dealt with until the Sanjari pargana of the khalsa and some of the zamindaris have been announced.

In re-forming patwari circles the main object kept in view was to cause as little dislocation as possible, so far as was consistent with the considerations noted above; to require no patwari of long standing to change his residence, and where it was necessary to shift patwaris recently appointed, to move those who had incurred the least outlay in settling themselves, and to arrange with the malguzar, or otherwise, for their houses to be taken over at a fair valuation to be paid to the patwari disturbed. It would at first sight appear that where the staff is being increased, there would be no necessity to abolish any of the existing patwari head-quarters, but the distribution is very unequal; in some tracts, the average was well below 10,000 entries per circle, whereas in others it reached 15,000, and I asked for 821 patwaris so that it might be possible to reasonably curtail the higher figures without re-constituting the tracts where a lower average prevailed.

The question of disturbance has however been free from much difficulty, because of the fact that out of a staff of 739 men, no less than 358 had died, resigned or heen dismissed during the previous eight years, and many of those newly appointed had not settled themselves or had incurred no great outlay in doing so.

Mr. Khande Rao, the Superintendent of Land Records, unfortunately died suddenly, before these arrangements were quite complete, and I have myself been too much occupied with this report for the past 10 days to be able to spare much time for other matters. I hope, however, before leaving the district to have settled any complaints arising out of this re-distribution, and to have prepared a draft on the revised halkabandi arrangements, which will only require the completion of the figures for the funds locally available, dependent as stated above on assessments not yet complete to render it ready for despatch.

109. The District Revenue authorities will do well to romember that this System followed. increase in the staff of patwaris has only been made, because it is admitted that a patwari cannot be expected to deal successfully with more than 10,000 entries during the field season. The field season for annual inspection is not less than four months, and therefore if those 10,000 entries represent only two villages, the patwari will be at work for two months on each village; if those 10,000 entries fall almost entirely in one village, he will be occupied for considerably over two months on that village. He is required to attest every entry, and if he finds any change in possession or otherwise, to make the necessary alteration. Owing to the lakhabata distribution the fields of one tenant are scattered all over the village, and to secure his own interests the tenant must follow the patwari about day by day for two or three months. Allowing for holidays and sickness the patwari must, in order to dispose of 10,000 entries, maintain a daily average of 100 entries. In a block of 100 entries practically every cultivator in the village will be represented, for adjoining fields held by the same owner have, subject to certain limitations, been grouped. This daily attendance involves a great loss of valuable time. I am personally in favour of recording change on application only. This would remove this great tax on the time of cultivators. The proposal may appear retrograde, but it is retrograde only from the departmental point of view, which requires Government to incur full responsibility for the accuracy of every one of the four and-a-half million entries in the khalsa; from the point of view of relieving the people from harassment and educating them to safeguard their own rights and property and to depend less on the ever present attention of Government, I do not consider the proposal to change on application only retrograde, and I think that the results would be far more free from inaccuracies, that often lead to injustice, than at present.

The chief, if not the only, argument against change on application only is that the people will not take the trouble to get changes recorded and the record will soon become inaccurate. The people are lax in such matters, but the failure to record proprietary changes may be pushed too far. A proprietary mutation implies several visits to the tahsili, with considerable loss of time and some cost. The cost is not always limited to the bare fees prescribed. An application for change to the patwari will be carried out on the spot without loss of the applicant's time. Theoretically the cost will be nil; practically it will not amount to more than the applicant at present pays for permission to absent himself on occasions from the daily check, and he will not grudge time or cost for what he really requires.

It is, in my opinion, certain that the cultivators would so welcome a change from the present system that for this reason alone they would be most careful to inform the patwari of changes and get them recorded. But if not, and if they suffer by this, they will only have themselves to blame, and others will profit by the example. They will then come to look upon the accurate record of their land as an advantage and a benefit and not as a burden, as it certainly is at present.

If the cultivators are too remiss and careless to inform the patwari of change and go with him for one day to get the change recorded, it might be

inferred, even if it had not been amply demonstrated, that they would resent having to follow the patwari about week after week, and would refuse to do this wherever they were sufficiently bold-spirited to resist the authority of the patwari. If they do not attend the patwari, the patwari, and especially a new patwari (there have been 358 new appointments in eight years + 61 now due to augmentation of staff, total 419) is at the merey of any unscrupulous tenant who misinforms him; if on the other hand the patwari has any log of his own to roll, he has his excuse for error ready to hand. In 1899-1900 the errors detected by the Superintendent of Land Record and his assistant amounted to 6 per cent. of the entries tested and in 1900-01 to 8 per cent. The cultivators attend for an occasional visit, when they will not attend day after day for the patwari. Then the error is discovered. It is a serious consideration that Government is directly responsible for every one of those mistakes and for every injustice that results therefrom.

I believe that change on application only would produce no inaccuracy to equal this, and I would permit no change except after a formal enquiry by the patwari from both parties affected. The present system often results in serious friction; harassment day after day and year by year causes the cultivators even to refuse to attend for map correction and attestation. This friction will increase, and not decrease, as they become more intelligent.

The present measures for improving the staff and increasing the supervision are intended to eliminate error. Half measures are uscless; if the attendance of cultivators is to continue as heretofore, error will not disappear. If error is to be eliminated, the hands of the Land Record staff must be greatly strengthened in the matter of compelling attendance, and resistance must be crushed.

It is possible that the resistance may not be so serious as I anticipate, but even then the loss of much valuable time will continue and will be augmented. Should, however, the resistance prove serious, it will be as well to remember that it will not be altogether without foundation. Reckoning on the basis that a well-to-do cultivator sends one of his sonjyas or permanent labourers to represent him, and the pay of that sonjya at 2 annas a day, the expenditure involved in a village of 5,000 entries per cultivator is Rs. 6-4-0. This may be endured with equanimity by a well-to-do man, but it will often equal the amount taken as rent from the smaller tonants. Present khasra entries in the khalsa are roughly four and-a-half millions divided amongst 3,317 villages or 1,355 entries per village. Taking as an average 30 cultivators per village and cost calculated as above, the burden laid upon cultivators by the present system amounts to Rs. 1,67,923, and at the least to considerably more than the whole annual cost of the augmented Land Record staff.

Instruction reorgitment.

110. The great changes in the patwari staff are not due to the extra and demands made upon them for settlement, famine and census work, for in the year 1894.95, before any of these causes contributed, 96 new appointments were made, i. c., more than twice the average number of appointments since settlement operations commenced. The shortcomings of the patwari staff have been rendered very patent by the extra supervision employed at settlement, but owing to the impossibility of finding satisfactory men to replace them and the great value of local knowledge, they have been treated very tenderly, and dismissal has only been used as a very last resort. Many of the changes are due to deaths or resignations, and many of the orders of dismissal have only been passed on men who have in fact dismissed themselves by refusing to do their work and leaving their circles. Training classes for recruits and incompetent patwaris were held every year during the rains, except in the famine year of 1900, when the patwaris were in their circles, and every literate man or boy had obtained some sort of famine or census employment.

320 candidates and 234 incompetent patwaris were put through the training class.

111. Side by side with the announcement of jamas and rents, arrangements to equip a well paid class of village watchmen or kotwars were made in accordance with the instructions given in Articles 289 and 290 of the Settlement Code.

Before revision the total strength of kotwars in the tahsil was found to be 655, i.e., practically one for each village excluding hamlets. In a few important villages the number of kotwars exceeded one, due either to their being exceptionally large or being divided into two or more perfect mahals, so that their management could not be carried on well by only one kotwar.

The usual rate of remuneration per four bullock-plough was 10 kathas of dhan (unhusked rice), and the total amounted to 8,785 khandis, which valued at the rate of 2 khandis per rupec comes to an aggregate amount of Rs. 17,570 or Rs. 27 per village. Besides this the kotwars were realizing fees for measuring grain, and often had small plots of service land, from one-fifth of an acre to 10 acres. The rate of remuneration varied from village to village from Rs. 2 to Rs. 100, but was on an average about Rs. 30.

The revised arrangements reduced the number of kotwars by 34, *i. e.*, from 655 to 621. This was due to amalgamating small villages where suitable provision could not be made otherwise. 84 more would have had to have been brought under reduction had the malguzars of their villages not come forward to contribute extra sums to their support.

The revised remuneration in cash from malguzars and tenants for the whole tahsil amounts to Rs. 22,971 including the value of service land or Rs. 37 per head. The romuneration, however, varies as below :---

				Cali	2810	Villages
Rs.	20	to	Rs.	24		\$ 5
,,	25	to	11	30	200	163
,,	31	to	••	35	18 1	68
Ábo	٧O		Rs.	36	889 /	851
				0.4	COLUM-	
				Total	Y 89.2	58 7
				at the	d this to	

34 villages have two kotwars each. The measuring dues have not been included in this calculation.

The rate per rupee of rental necessary to produce this remuneration varied from 6 to 12 pies.

New appointments of kotwars were made in six cases, where the incumbents were too old to discharge their duties or were dismissed for bad conduct. The changes thus effected were not met with any opposition. The malguzars and the police were both consulted before orders were passed.

112. The revenue is paid throughout the tahsil in two equal kists; and Instalment of rethis meets with the unanimous approval of malguzars and cultivators, except venue. that some Chamars have practically abandoned their cold-weather cultivation for carting. It is probable, however, that when they find that they are compelled to pay up their full rental, they will resume their cultivation as before. This practice had sprung up too recently to justify a permanent alteration of the distribution.

Partitions.

113. During the progress of settlement operations three villages only have been perfectly partitioned, viz., Patan and Khorpa in the Drug Tahsil and Deokar in the Simga Tahsil.

114. As assessment has been limited to the Drug Tahsil, a fresh printed Music. register for the district has not been prepared. The Deputy Commissioner has been supplied with a copy of the entries for the Drug Tahsil as they stand now.

115. The revised wajib-ul-arz as sanctioned for the Drug Tahsil is given Wazib-ul-arz. in the appendices to this roport. In Clause XIII, Irrigation, provision has been made for a person other than the owner repairing a tank, and it is expressly stated that he will not thereby acquire any fresh right over the tank. Many tanks have been made by persons who are now too poor to carry out the repairs necessary to maintain the utility of the tank. They will not allow others to do these repairs lest they should thereby acquire a claim to the tank.

Clause XIV of Mr. Carey's wajib-ul-arz provided that hides and carcases of dead cattle were the property of the Chamars. Clause XVII of the present wajib-ul-arz agrees with Clause XIV of Mr. Carey's zamindari wajib-ul-arz and mehrai or payments to the malguzar for the skins has been excluded from miscellaneous income.

Notes were made for the wajib-ul-arz at attestation, and two forms printed in the vernocular were filled up at announcement of each village. One was filed with the patwari misl and one was filed with the sadar record.

Section V.-General.

116. Suggestions were made for village works in case of famine all over the Drug and Raipur Tahsils at aftestation. The famine of 1900 supervened and most of the suggestions were put in hand in the Raipur Tahsil, with good results generally, as can be judged from the figures of areas irrigated in 1901, and certainly in particular cases. In the Drug Tahsil no good results were apparent, and it would appear that the selection was inferior owing to lack of experience, or that the famine notes were not properly utilized and understood. I had not much time for miscellaneous enquiry when revising the Drug Tahsil in 1901, but certainly many of the works put in hand there were not according to proposals. There is not much scope for village work in the Dhamtari Tahsil, but in 1902 sites were selected and proposals made for the Simga Tahsil by the map correction and attestation parties, except for a few villages between the Kulhan and Karun rivers, which did not come under attestation.

Cost of settle.nent.

117. The total cost of the present operations from October 1895 up to the end of September next will be Rs. 3,15,565, of which Rs. 60,113-5-8 has been incurred on map correction, and the balance, including an estimate of Rs. 7,270 for the work that remains to be done, falls to attestation and assessment. Map correction has been effected over the whole khalsa, attestation has been effected for the whole of the summarily settled area, the Raipur Tahsil, and 417 villages of the regularly settled portion of the Dhamtari Tahsil, or for 2,506 villages in all. The assessment, however, has owing to bad seasons been revised on the soil-unit basis only in the Drug Tahsil; a summary abatement has been proposed over the Raipur Tahsil—Pallari and Rohasi groups (114 villages) and over the three eastern circles of Simga (436 villages) – and a re-distribution of revenue has been proposed for 72 villages of the Sanjari group of the Dhamtari Tahsil.

It is useless therefore to attempt to show any incidence of cost per square mile or otherwise, except for the map correction work, which with Rs. 60,113-5-8 for 5,432 square miles gives Rs. 11-1-1 per square mile.

The separate cost of the attestation and assessment of the Drug Tahsil cannot be definitely stated, but a very close estimate making adjustments for the time spont by the superior staff on the assessment of Drug and the control of the office, which was engaged on the work of the other tahsils, is Rs. 78,100 or Rs. 67-0-7 per square mile. The actual cost of map correction in the years 1895-97 in the Drug Tahsil was Rs. 13,956, but of this a certain amount was incurred for pencil traces for the Raipur Tahsil, and when Mr. Scott was employed on famine duty, his pay was not properly chargeable to settlement. The real cost may be taken at about Rs. 10 per square mile, and the total average cost per square mile of the Drug Tahsil for map correction, attestation and assessment works out at Rs. 77-0-7.

It is worthy of notice that more than half the total expenditure, viz., a sum of Rs. 1,64,626-4-2, is on account of the pay and travelling allowances of the Settlement Officer and Assistant Settlement Officers, whereas the expenditure on Inspectors and Superintendents is only Rs. 45,408-14-10. The pay of Inspectors does not therefore constitute a very important fraction of the total expenditure. Liberality in this matter at the right time may, however, save operations from having to be protracted into another season. The timely concession of Rs. 5,000 for Inspectors may save an extra charge of Rs. 50,000 and prevent the loss of one year's increment of enhanced revenue.

The expenditure in the famine year 1899-1900 was Rs. 30,501, out of which Rs. 18,059 went towards the pay and travelling allowances of the Settlement Officer and one Assistant Settlement Officer, but as both were employed on famine duty with magisterial work, the whole of this sum is not a legitimate charge to settlement.

Owing to instructions to curtail expenditure in every way possible after the famines, rewards to patwaris were not given either in the famine years 1896-97, 1899-1900 or in the years succeeding them 1897-98 and 1900-01. There was, moreover, less necessity for distributing rewards in these years, for all deserving patwaris were provided during the famine with posts as famine circle officers, &c., on much increased pay. That is to say, it had been possible to make a much greater difference in favour of the good patwaris than could have been effected by a very large allotment for rewards.

It was endeavoured to promote enquiry and research amongst Inspectors by offering prizes for essays on the agriculture of the district. Whether from want of leisure or want of aptitude no essay was written worth submitting to the Commissioner of Settlements, and the only paper with any pretensions to merit, and which was awarded a prize, showed little or no result from original enquiry.

118. The Drug Tahsil was announced with effect from July 1901. The Term of settlement. settlement is to run for eight years. The settlement of the summarily settled tracts of the Raipur District was continued after 1900 in order to place these tracts on the soil-unit system in force throughout these provinces. No enhancement of average rents was attempted, but only the assessment of area held without rent and some levelling up of very low rents. Malguzars were treated with great lepiency both in the valuation of the home-farm and in the fraction of assets taken as revenue. In some cases the fraction of assets has been pitched very low and will require raising at future settlements; but this, in my opinion, should only be done when the Settlement Officer makes a material addition to the cash assets by his rent proposals. If the malguzar himself has raised the rents sufficiently to provide a fair increase of revenue, the fraction of assets should not at the same time be raised. This settlement is only an *ad interim* arrangement for the purpose stated above, and hence a very short term has been fixed.

The Sanjari revision of assessment will take effect from July 1903 and will run for eight years.

119. Mr. Dunne was in charge of map correction from January 1898 Services of officers. to the close of operations. He has great capacity for control and organization, but a little more decision and quicker perception of the impossibility of the situation in the Raipur Tahsil would have prevented a serious flaw in his work. He did his utmost to avert a failure, which, I now think, was inevitable from the time he joined the district. The rest of the work corried out under his control was thoroughly satisfactory.

Mr. Anthony, as Settlement Superintendent, loyally seconded Mr. Dunne's efforts. When Mr. Dunne went on three months' leave during the rains of 1902 he held charge and did well.

Mr. Lakshman Rao Bapuji joined the district at the end of 1897. As a worker he is, in my experience, unequalled, and has throughout been the mainstay of the attestation and assessment branches. To his untiring exertions and example during the field season of 1898 it is chiefly due that the attestation of the Drug Tahsil was brought almost to completion within the season in spite of great difficulties and delay at the outset. He has rendered me invaluable assistance in rent-rate and assessment work and by his control of a large and difficult staff.

Mr. Gajraj Singh was a hard-worker himself, and had great power of getting work out of his subordinates. He detected most of the rent concealment which came to light.

Mr. Abdul Haq did much good and hard work. He was much liked and respected by the people and received their entire confidence. He has great perception and tact.

Mr. Abdul Ghani (1901 only) and Mr. Hari Gunwant (1902 only) served for short periods only and hardly came up to the requirements of an exacting district.

Mr. Khande Rao, Superintendent of Land Records, was an indefatigable worker, and exercised good control over his large and somewhat unsatisfactory staff of patwaris. He was esteemed by all with whom he came in contact, and his recent death is much regretted.

The subordinate staff generally rendered excellent service. Except for a few, that were quickly got rid of, most of the Inspectors and officials have been distinguished by good hard uncomplaining work. They complied to their utmost with the excessive demands that had to be made upon a staff that was at the outset very inadequate.

Many selected patwaris also did excellent work, and that of the best of them was hardly inferior in quality to that of the best Inspectors, and was often superior in quantity.

RAIPUR : The 14th March 1903.



E. R. K. BLENKINSOP,

Settlement Officer.

Secretariat Press, Nagpur :-- C. O'C., 31-5-1903-255.

APPENDICES.

- I. Former revenue demand.
- II. Soil classing by groups.
- III. Former and present crops.
- IV. Details of village area.
- V. Former and present holdings.
- VI. Rental payments compared.
- VII. Siwai income.
- VIII. Valuation of sir, &c.
 - IX. Former and revised assets.
 - X. Revised revenue.
 - XI. Increase in revenue assets and cultivation.
- XII. Revenue from malik-makbuzas.
- XIII. Net revenue increments.
- XIV. Rules for Patwaris on map amendment work.
- XV. Rules for Inspectors on map amendment work.
- XVI. Note on Hindi office work.
- XVII. Wazib-ul-arz.

APPENDICES.

सत्यमव जयत

List of Appendices.

TATEMENT I .- Details of revenue domand prior to re-settlement.

- " II.—Area in cultivation classed according to soils and positions.
- " III.-Cropped area classified according to crops.
- " IV.-Details of village areas.
- ,, V.-Details of holdings.
- ", VI.-Details of malik-makbuzas' and tenants' payments with incidences per soil unit of rent.
- " VII.—Details of siwai income.
- " VIII .--- Valuation of sir, khudkasht and land held by privileged tenants.
- " IX.-Total assets on which assessment based.
- " X.--Revised revenue as proposed, sanctioned and announced.
- " XI.-Assessment comparison.
- " XII.—Distribution of revised revenue between malik-makbuzas' and malguzars' lands.
- " XIII.-Net revenue increment for regularly settled area.

APPENDIX A .- Rules for patwaris on map amendment work.

- " B.-Rules for Inspectors on map amendment work.
- " C.-Note on Hindi office work.
- " D.-Form of Wajib-ul-arz sanctioned for the Khalsa portion of the Raipur District.

					Land Reven	NUE DEMAND
N 0,		Name of Asses	esment Group.		As fixed at former settlement (1885—87).	At the time of re-settle ment.
1		2			3	4
		DRUG T	AĦSIL.		Rs.	Rs. 5. p.
L	Dhamda	***			21,159	21,147 6 7
2	Nankatti				21,445	21,414 8 8
3	Drug				20,260	20,220 12 7
4	Bhilai	•••7	•••		20,525	20,527 0 2
5	Patan				14,984	14,984 0 0
6	Rauchirai	•••	•••		14,020	14,020 0 0
7	Arjunda				21,619	21,619 6 0
8	Finkapar	•••	A	322	16,274	16,274 0 0
t 5	Bhanders				22,106	22,106 0 0
			Totai for the Ta	hsil	1,72,392	1,72,313 1 7
		DHAMTARI	TAHSIL.	्राष्ट्र व जयते		
1	Sanjari		•••		5,172	5,172 12 0

STATEMENT I.—Details of revenue demand prior to re-settlement.

						RICE LAND			
Serial No	Name of Assess- ment Group.	Soil class.	Baira and Gabhor.	Dadha.	Dadha, Gaurasa.	Dadha, Irrigation.	• Tangar.	Tanger, Gaurasa.	Tangar, Irrigation.
1	2	3	4	· 5	6	7	8	9	10
			Aores.	Acres.	Acres.	Астов.	Acres.	Acres.	DRUG Acres.
	ſ	Kaubar	4,476-13	835·82	39.85	24.55			
		Dorsa I	2,294.05	1,892-49	124-36	195-89			
		Dorsa II	1,524.07	2,947.88	140.74	241.91	101.00	0.11	
1	Dhamda	Matesi	820-88	3,218.40	368-11	835 [.] 94	653 [.] 51	61 74	11.70
		Bhata		97:81	10.77	4.22	862 [.] 51	15.28	4'74
	l	Patpar-kachhar		(The second		***	rat	•••	
		Total	9,115-13	8,992.40	683:83	802 51	1,117 02	77.08	16.44
		Kanhar Dorsa I Dorsa II	1,529 97 1,501-56 1,648-21	354-28 1,732-42 6,834-15	27-26 70-49 256-71	111 69 386 66 843 12	 231:55	 2'44	 12:25
2	Nankatti {	Matasi	922-57	6,992.93	698-90	1,085.01	1,509.16	92-02	60.88
-		Bhata		356.46	84·89	26.79	362.57	8.72	5:37
	l	Patpar-kaebhar	***						
		Tota]	5,602.31	15,770-24	1,088-25	2,453-27	2,163.28	103-18	78
	ſ	Kanhar	4,742 [.] 34	998·29	15.97	41-36	-11		•••
		Dorsa I	4,118-32	4,022.75	77°C0	326.62			***
		Dorsa II	1,470.79	4,568.77	115.92	227.61	273.55	0.22	1.
3	Drug (Matasi	1,679.03	3,549 02	452·14	560·32	875-89	24.87	- 43
		Bhata		280-05	16·02	31-16	490 44	22.04	9
		Patpar-kachhar							
		Total	12,009.48	16, 418-88	677:05	1,187-07	1,639-88	47.13	5

STATEMENT 11.-Area in cultivation classed according.

		NON	BICE LAND.				TOTAL.			
UABINC.		TIKEA			BARI,					
Ordinary.	· · · · ·	Ordinary. •	Ganrasa.	Gaurasa.	Irrigation.	Ordinary.	Acres.	Percentage.		
11	12		14	15	16	17	18	19		
HSIL.			<u> </u>							
Acres.	Астев,	Acres,	Acres.	Acres.	Астеб.	Acres.				
10,443 88	102-13	57:91	0.31	Ú.	12.94		• 15,993·72	20		
27,861-21	438-70	1,868 82	27-20	78•50	12.03		34,792.63	44		
3,486-58	98 [.] 13	5,169.97	51-03	30 84	6'41	1	13,798'67	17		
	•••	1,303-73	13-58	S-58	35.76		6,831.93	9		
		6,769.61	110-62	75-14	67-93		7,518-58	10		
		55 78	4.02	3 71	2		63 51			
41,791-67	639.05	15,225-82	20676	196-97	13436		78,909:01	147		
	(•			
8,253 96	54-48	36-44	1.26	0 02	2.79	,	10,372 10	13		
22,147.45	233-60	932·01	1.77	3 93	9.64	l	27,019-53	31		
5,070-13	254-73	4,871-15	17.34	11-36	13 95	i	19,567-29	25		
.24		2,162.06	\$5 08	7-03	21.93		13,647.51	18		
	•••	6,654-60	110.08	68:94	111.08		7,739.50	10		
		168.42		,	0%0)	168-7:	2		
35,471-51	542'81	14,824-68	165-53	91 48	159.60)	78,514•7(
8,072-53	151-28	54 7'03	1.24	9.88	5.60		14,585.91			
13,441.22	235-34	1,342.76	12.09	93-53	26-43		23,696.06			
4,353.87	169 60	2,942.40	19-33	27.85			14,194-63			
	14	578-15	72.60	30.61	27:04		10,892-23			
		1,383-51	83 81	24.94	63-51		2,404 69			
		4 33 .63	1.15	32-12	1		4 66°90			
25,867·62	556:22	7,227 78	190-52	218-93	146:05		66,240 42			

, soils, positions, &, for each Assessment Group.

•

					I	RICE LAND.	1		
erial No,	Name of Assessment Group.	Soil class,	Bahra and Gabhar,	Dadhs.	Dadha, 1 Gaurasa,	Dadha Irrigae	1 411g 4r.	Gaurasa, Tangar.	'fangar, Irrigation.
		3	6	5	·	7	8	9	10
		•	Acres.	Acres.	Acres.	Aeres.	Acres.	Acres.	DRU Acres.
	ſ	Kaphar	372 12	229.95		12-25			•••
		Dorsa I	2,013:27	3,440-11	81.54	\$16.23			
		Dorea II	1,328-41	6,745-13	213:97	768.28	137-36	414	51
6	Bhilsi {	Matasi	1,956-58	13,408-88	941.69	1,695 49	1,558-49	35.81	7-4
		Bhata		926 ·27	48'65	50'11	526.02	19-11	2.
		Patpar kachbar .			1		•••	***	
		Total .	F ,670-68	24,749 84	1,285.85	3,342 36	2,221.87	59 [.] 06	15
					9.46				
		Kauhar	6,056.64	는 귀엽 승규	29.71	555-55			
		Dorsa I	3,181.02	2,325.32	78.63	418 13	22-21		0
ឥ	Patan		1,284/47 1,632/58		263 20	823.00	342·70	6.40	2
				121-48	5.03	11.02	121.66	0.41	e
		Bhata Patpar-kachhat							
		'Total	12,154-73	10,539-21	386-03	1,941.01	466.57	6.81	-
		(Kaubar	2,612.6:	1,629-85	58+4,5	72:48			
		Dorsa I	3,104.0		67.24	399-40			
		Dorsa II	331.4		34-14	103.45	24-13	1.0	6
ť	Banchirai		1,863-8		339-91	638.71	706.71	35-9	2 1
		Bhata		167-20	12.63	C-82	377-15	5.2	
		Patpa:-kachhar							
	ļ			4 15,613-93	502·37	1,219.86	907-99	42.4	6 3

		NOI	N-RICE LAND.	_			TOT	AL.
Gonn,	ART.	Tiri	£ 4 ,		BARI.			
Ordinsty.	Bharkila.	Ordinary.	Gaurasa.	Gaurasa.	Irrigation.	Ordinary.	Астов.	Percentage.
11	12	13	14	15	16	17	18	19
AHSIL(Cur	u(d.)							
Acres.	Acres.	Acres.	Астез.	Actes,	Acros.	Acres.		
4,013-53	52.09	85.26		1	3.30		4 ,76 9 10	6
16,885.32	116.79	1,384 64	5.19		16.13	1.04	24,760.26	31
3,048.07	6 3 :07	5,184 52	0 [.] 43		9.25	7-26	17,515.77	22
		1,918-88	72.76		23 [.] 46	15-20	21,684-23	27
		8,956-29	837-58		97.77	72-26	11,036 45	14
				CTRUCK,				
-			20		3	· -		
23,946-92	231.95	17,529-99	416 96	in .	149-91	95 76	79,715-81	
9,137-30	111-43	795 55	0.2	4.08	33-85		17,522.08	38
5,092.08	35.88	1,520.71	2.06	31.82	48.73		12,820.88	28
592 ·11	12:40	1,283 26	3.38	17.97	32:33		6,070.44	13
		228.98	27.74	60.84	30-59		7,948:03	17
		514 39	22.42	36.43	10.65		850.21	2
		646-21	11:09	12:83	8·92		679.04	2
14,821.49	159.71	4,869-10	67 [.] 21	163 96	165-07		45,890.68	
	g				· 			
10,018-80	192-31	386-85	•••	9.68	17:90		14,998 ·3 5	34
3,84 8·37	95 ·17	1,429-88	619	27:94	37-28		14,398-49	82
89-39	1.60	597 ·2 9	7.20	14/89	4 .65		3,540-17	
		444:87	41-36	93:29	25'98		11, 3 91-25	2
		683 [.] 67	26-81	33:80	10 18		1,126-69	
•••		60.85	***		0.36		61-21	
18,951-56	289 08	3,608-41	80-56	179:60	95-75		44,516'16	

to soils, positions, &c., for each Assessment Group.-(Contd.)

No.	Name of Asses ment Group. 2	so. Soil class. 3 Kanbar Dorsa I Dorsa I Dorsa I Bbata Patpar-kachbar		Babra and Gabhar. 4 Acres. 9,086-35 4,788-26 360-26	Dadba. 6 4 cres. 2,338 47 6,389 52	Dadha, Gaurasa. 6 Acres. 38'05	Dadha, Irrigation. 7 Acres. 40 31	fangar. 8 Acres.	Tabgar, Gaurses. 9 Aores.	Tangar, Irrigation. 10 DRUC Agres.
		Kanbar Dorsa I Dorsa II Matasi Bbata		Acres. 9,086:35 4,788:26	۵ cres.	Acres. 38:05	¢	Acres.	Aores.	DRUC Agren.
7 🔺	Arjunda	Dorsa I Dorsa II Matasi Bbata		9,086 [.] 35 4,788 [.] 26	2,398.47	36*05				Agres.
				2,195·49 	1,626-10 8,908 38 192-93	150-63 39-55 656-86 42-39 	408-75 85-61 700-57 16-40 	 178:70 1,965:39 635:71 	 2*45 69*40 37:84 	 44-08 8-59
S Pi	inkspar	Total Kanhar Dorsa I Dorsa II Matasi Bhata Patpar-kachhar	•	16,430-36 4,040-81 2,813-82 919-54 245-45 	19,515 39 2,161 05 4,499 40 4,346 84 2,629 22 51 87 	92548 41:24 169:63 238:22 294:06 2:23 	1,235 64 8 05 120 10 157 00 124 12 	2,779-80 162-38 408-65 90-77 	109-69 0-81 11-85 4-89 	47-67 1-38 1-38
9 Bbs	unders, {	Total Kanhar Dorsa 1 Dorsa 1 Matasi Bhata Patpar-kachhar		8,019*62 7,718*52 5,696*11 1,025*97 468*56 	13,689.38 3,546.34 8,209.31 3,364.38 2,846.02 60.02	745:38 42:80 804:37 194:45 251:64 8:47 	409 27 8-41 120-39 187-79 178-81 	681-80 106-91 270-83 70-63 	16°85 2'47 4'58 	3-13 8-36

STATEMENT II. - Area in cultivation classed according

			N-RICE LAND.				TOT	АТ.
Gann	ABI.	TIE	BA.		Barj.		101	Λ <i>L</i> .
Ordinary.	Bharkila.	Ordinary.	Gaurasa.	Gaurasa.	Irrigation.	Ordinary.	Acres.	Percentage
11	12	13	14	15	16	17	18	19
HBIL-Cont	t d .)							1
Aoren.	Acres.	A cres.	Acres.	Acres.	Aêres.	A cres.		
11,133 ·01	394 ·49	538-58	1.26		38·3 8	25-43	23,692-63	
12,051-25	499-43	3,583.17	10.85		59-79	104.77	28,046-42	
187 ·60	15-52	1,952-89	1 92		3:51	66-44	4 ,500 [,] 55	
		5 03·7 0	42·3 0		43·36	64-02	15,204.55	
		1,962-89	97-46		14.92	76-41	3,0 79 [.] 53	
		423-42	9.75		1.85	28.51	4 63·53	
23,371.86	909:44	8,964-85	163 [.] 84	I WHI	167-81	365-58	74,087*21	
3,913-80	44.56	173.47	6.19	13.28	24.17		10,426.62	
9,952.37	167-23	1,468.80	5.23	80.97	26.94		19,254-49	
2,442.63	41-69	3,515-19	6.63	77·39	a 25·68		11,934-78	
		1,869-49	7.84	50-03	35 -59		6,177 [.] 95	
		2,678.71	26 ·31	26.10	7.74		2,889.62	
		171-74	0.28		0.29	743	1 72 ·86	
16,308-80	283:48	9,377 4 0	52.73	197.77	120-71		19,855 ⁻ 82	
		225.07			20.15	22:45	00 000.0F	
9,1 29 -92 15,921-45	122-67 1 5 0-40	1,834-44	0·92 23·59		20 ⁻¹³ 37·81	22°45 36°53	20,888·25 32,333·90	٠
1,114.25	15.06	2,421.14	20 30		26.36	45.14	8,878.69	
1,118.20		858.05	35.60		54-49	32.31	5,001.08	
		1,679.06	20.03		7.58	15.06	1,860.60	
		408.19			114	9.10	417-29	
26,165-82	288-13	7,425-99	104-91		145-84	160-59	68,830-01	

to soils, positions, &c., for each Assessment Group.-(Contd.)

					BICE	LAND.			
Serial No.	Name of Assessment Group.	Soil class.	Bahra and Gabbar,	Dadha.	Dadha, Gaurasa.	Dadha, Irrigation.	Taugar.	Tangar, Gaurasa.	Tangar, Irrigation,
1	2	3	4	б	6	7	8	9	10
			Acres.	A cres.	Acres.	Acres.	Acres.	Åcres.	Åores.
1									DRUG
:		Kanbar	40,635-21	13,398-99	271-08	453-41			
		Dorna I	29,510.48	37,898-32	1,074-97	3,829 [.] 59			
	Total for the	Dorea II	9,993.12	83,399 -28	1,302-33	2,962-90	1,237.79	13-18	21-26
I	Tabsil.	Matani	11,784-03	56,268-67	4,266-51	6,144.77	8,351.33	342-89	188-50
		Bhata	E.	2,254.08	181-08	144.52	2,887-46	113-74	8595
•	Į	Patpar-kachbar		m					***
		Total	91,922-79	143,214:34	7,095-97	13,035-19	12,426.58	469-31	54571

STATEMENT II.- Area in cultivation classed according

सत्यमेव जयते

DHAMTAR

ſ	Kanhar				
1. *SANJARI.	Dorts I	••;			
	Dorsa II	•••		•••	•
1. * SANJABI.	Matasi	•••		•••	
	Bhata	•••	~		
	Palkachhar			***	
t.	Matasi Bhata Paikachhar Patpar-kachhar	•••	•••	•••	

Total

Information not availab

		NON	RICE LAND.						
Goni	GARI	Tig	BA.		BARI.		TOTAL.		
Ordinary.	Bharkil s .	Ordioary.	Gaurasa.	Gaurasa,	Irrigation.	Ordinary.	Acres.	Percentag	
11	12	13	14	15	16	17	18	19	
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.			
AHSIL,{Con	eld.)								
74,116.73	1225-44	2,846.46	12.30	37-14	159-17	47.88	138,198-81	23	
127,105-72	1,972.63	15,365-23	93-17	256 [.] 69	278-57	1 12 34	217,122.66	87	
20,884.63	671-80	27,937-81	132:03	180.20	145.52	118.84	98,50 0 ·99	17	
		9,305-25	348.86	250.38	302-60	111-53	97,725-82	18	
		31,282.73	825-12	265-35	391-31	163-73	28.505 [.] 07	7	
		2,368-24	26.54	48-65	12.02	37-61	2,493.06		
221 ,697-08	3,809-87	80,168.72	1,418:02	621-93	1,048.71	1,285-19	687,549-41		
AHSIL.		ا المانية على المانية المانية المانية المانية الم)¢			<u> </u>		
		87		ाव जयते			2,423.77	8	
		<i></i>					1°,687 40	44	
		4	•••				8,902-27	28	
					.,,		2,595-15	8	
••					r++		3,758-16	12	
		•				1.	80.94	***	
		•••	1 44	***			28.25	***	
***		•••					31,425.94	191	

to soils, positions, &c., for each Assessment Group.-(Concld.)

position classes.

STATEMENT III .- Cropped area at the present

•

Serial No.		Name of Assessment Group.		Wheat.	Rice.	Sugarcane.	Linseed.
1		2		3	4	5	6
		• (At former settlement (1885-87)		Acres. 13,428·12	• Acres. 22,568'32	Acr es.	DRUG Acres. 4,751-22
1	Dhamdha	Prior to famine of 1899-1900		12,595 [.] 88	14,303.47	<i>'</i>	3,259 [,] 29
•				11,596 [.] 78	13,728-42		2,208-20
		• (At former settlement (1885-87)		11,553 97	2 9,0 2 0·46		5,473 [.] 89
2	Nankatti	1 1 Duine to familine of 1800 1900		8,250.20	18,399.30		2,255-42
2	WRITERCOL	At revision		8,614.25	17,479 51		1,783-18
		At former settlement (1885-87)		8 ,811 ·93	80,812.54	•••	4,013-87
_	_			6,580.49	24,964.54		3,776 [.] 74
3	Drug	CT7833		5,766.02	21,602.31		2,725-90
		(At revision		8,380*30	37,228.59		5,825 91
		At former settlement (188587)		4,179.82	30,735.61		5,717-44
4	Bhilei	{ Prior to famine of 1899-1900		3,650.99		 0.75	4,023.95
		At revision					5,010-22
		At present settlement (1885-87)		6,699-93		··· 8·16	4,948 94
5	Patan	Prior to famine of 1899-1900	•••	8,042.54		8.10	3,793.88
		At revision		1,515.42			
		At former settlement (1985-87)		3 ,960·80		30.08	8,303-21
6	Ranchirai	Prior to famine of 1899-1900		1,741.50		2.76	4, 997-69
	1	At revision		1,322-84	20,370.92	0.25	8,848-29
		(At former settlement (188587)		7,500.14	\$6,368.50		5,164-67
2	Arjunda	Prior to famine of 1899-1900		8,836-20	31,781.28	7.69	5,145.55
		At revision		2,796.73	26,123.07		8,5 10 ·1 8
		(At former settlement (1885-87)		5,046.64	4 21,197.74		5,194.03
8	Pinkapar	Prior to famine of 1899-1900		3,049.6	20,491-83	0.50	4,920.10
		At revision		2,293 0	2 14,736.62		2,764-36
		(At former settlement (1885-87)		7,791-2	6 29,598.68		5,883-51
	9 Bhandera	Prior to famine of 1899-1900		3,296·1	5 26,536-73	2.25	4,540.31
		At revision	•••	1,670.4	2 19,895.05	2.41	3,668-57
		At former settlement (1885-87)		73,173.0	9 256,475.73	80.08	44,120-08
٠	Total	{ Prior to famine of 1899-1900		46,571 [.] 8	9 214,210-10	21.36	89,556-4
		At revision	· ••	39,226-4	5 185,200.35	3.68	27,821.5
							DHAMTAR
	1 Sanjari	At former settlement (1885-87)		2,470.6			2,297·71 946·6
		(At attestation (1901-02)	•••	430-3	2 7,676-43	3 ····	0.000

,

'nd former Settlements classified according to Crops.

Kodos.	Maaur.	Teora.	Til,	Others.	Total.	Ares double-cropped.	Net area under crop.
7	8	9	10	11	13	13	14
HSIL.							····
Acres, 1,215-29	Acres. 630-75	Acres. 112.76	Acres. 619-17	Acres- 18,055-07	Acres. 71,180 [.] 64	Acres, 1,025-10	Acres.
23,591-98	395.78	597-44	406 86	8,606.29	62,756-49	3,989-91	70,155.5
39,999 86	358 83	581-51	248-33	9,042.38	67,764-11	4,175-39	58,766-5
837 70			926.40	22,734 51	72,180.94	•	68,588-7
	1,063.02	570.99		.	·	1,141-56	71,039-8
15,465-16	855-39	169.51	666 [,] 16	3,937-32	49,498-46	915.78	48,582-6
30,698-66	304 -01	712-80	838 [.] 98	4,863-03	55,293 87	1,606*83	53,687-0
170.90	448-89	118-60	270-82	18,165-44	\$2,811 .99	1,846-02	61,565-9
14,295 54	499-23	2,799-38	247-80	7,039 68	60,202-80	6,192 25	54,010 5
18,089-94	678 [.] 85	8,069-11	294-68	7,424.06	59 ,550·87	6,03 8·08	58,512-7
96-00	865-89	445 ·89	914-63	17,656.91	71,411-63	1,818-28	70,0 96 -8
13,169-04	486-44	1,266-33	821-65	5,613 .66	61,242 ·96	3,819-83	57,928-1
17,723-34	402·56	1,805-36	446-56	5,635-1 0	61,771-11	\$,008·31	58,762-8
	831-07	193-21	35-56	7,468-98	4 2 ,957 -66	2,931-22	40,026-4
6,989-08	330-28	939-18	207-72	12,719-65	53,438·64	10,418-61	48,022-0
10,697.60	236.67	741-82	171-27	12,525.05	52,252+62	10,032-24	42,220-3
	466·38	280.01	143-41	6,812-11	41,403-16	1,718-53	39,684.6
7,709-11	163.00	978.08	80.78	7,112.56	45,521.75	6,961.30	
10,844.75	110 32			5,328-54			38,560
		973-06	174-24		41,968-48	3,612.57	\$8,855.9
210-23	590-58	118-59	533-03	20,423-25	70,908 99	3,3 98·61	67,5104
16,300 75	226'51	1,148.16	\$61·78	12,098.08	70,906-00	9,883.57	61,022-4
16,665:23	266.66	2,611.06	810-24	10,113.51	62,396-66	3,629.98	58,766-6
1,219-48	168.78	255-19	3 01-99	17,983-35	51,867-20	5,100-99	46,266-2
1 2,9 38.56	95 ·2 2	832-97	266-09	11 ,2 77 [,] 85	53,871-93	10,806-57	43,065-3
16,748-89	78:48	1,241.76	181-65	10,927-63	48,967-41	8,190-36	40,777-0
	91-73	8.75	33 5- 8 2	85,861-42	79,071-17	14,730.74	64,840-4
18,205-65	131-56	1,276-28	25 5 85	17,829.64	72,074-22	16,108-98	55,965 2
22 ,655 [.] 03	131-84	1,902.10	164-32	18,691-52	68,781-26	12,890-34	55,890-9
3,747.54	4,456'04	2 ,0 5 3·99	4,080-83	175,158-04	563,293-37	32,606.05	530,687·3
127,664 87	2,633:47	10,007-28	2,813 66	86,034-13	529,513·24	6 8,594 -80	460,918-4
163,517-30	2,458.22	13,137.88	2,830-12	84,550-88	518,746-39	53,184-10	465,562-2
HSIL.							
 8,215 [.] 05	6·82 0·55	16·02 28·74	1,233.00	13,198-26	30,7 80 *08	1,790.09	28,939.9

•

STATEMENT IV .- Details of Village Area

			00	CUPIED AR	EA.			UNOCCU		
orial No.	Name of Assessment Oroup.	Ans	A IN CULTIVA	EION.	Area out of cultivation, i. c., waste	Total area				
		Under erop.	Fallow of 3 years or under.	Total.	and fallow of more than 3 years.	occupied.	Groves.	Tree-forest		
1	2	S	4	5	6	7	8	9		
								DRU		
		Acres.	Acres.	Acres.	Acres.	Acres,	Acres.	Acres.		
	(At former settlement (1885-87).	70,155-51	27.00	70,182-54	4,673-76	74,856-90		•••		
1	Dhamda. { Prior to famino of 1899-1900	58,766-58	20,232-46	78,999-04	1,890.57	80,889-61	1.87			
	At revision	63,588.72	14,665.63	78,254 ·35	2,711-30	80,065-85	•••	· •		
	(At former settlement (1885-87).	71,039-38	423 [.] 91	71,463-29	3,936 [.] 27	75,399 56		•••		
1	Nankatti. Prior to famiue of 1899-1900	48,582-68	29,932 08	78,514 76	4,293.67	8 2, 808-43	17			
	At revision	53,687.04	23,691-58	77,378-62	8,434 [.] 69	80,813-80	•••	•••		
	(At former settlement (1885 87).	61,565-97	1,650 20	63,216-17	998·11	64,214-28		•••		
3	Drug Prior to famine of 1899-1909	54,010 55	12,229.87	6 6,240 [.] 4 2	1,877-71	68,118 [.] 13	14.49			
	At revision	53,512 79	12,630 08	66,142.87	1,814.51	67,957 38	•••	•••		
	(At former settlement (1985-87).	70,098.34	1,731.56	71,829.90	1,715.68	73,545.58				
4	Bhilai Prior to famine of 1899-1900	57,923-13	21,792.68	79,715-8 1	1,332 86	81,048.67	1-20			
	At revision	58,762.80	20,893 46	70,656-26	1,403.52	81,059.78				
	(At former settlement (1885-87).	40,026-44	428.82	40,455-26	792.50	41,247.76	•••			
5	Patan { Prior to famine of 1809-1900	43.022.02	2,868-66	45,890.68	247.73	46,138.41	2.80			
	At revision	42,220 38	3,902 24	46,122.63	190 44	46,318-06	•••	,		
	(1) former estilement (1997 - 97)	3 9.681 63	221.47	39,906 10	1,139.62	41,045.72				
6	At former settlement (1885-87). Ranchirai Prior to famine of 1809-1900	38,560-15	5,955.71	44,516-16	621.97		2.23	•••		
	At revision	38,355 91	6,306.02	44.661.93	532-84	45-194-77				
			000 51		745-96	CO 10 0.07				
7	At former settlement (1885 87).	67,510·38	903-71 13,064-78	68,414-09	531-61	69,160.05 75,518.82	 1·69	•••		
'	Arjunda Prior to famine of 1809-1900 At revision	61,022 ⁻ 43	16,257 04	74,987·21 75,023·72	658.80	75,518 82 75,682 [.] 61	1.03	141		
	CAN LEAVENING	58,766.68	10,207 01	1						
	(At former settlement (1885-87).	46,266-21	267-36	4 6,5 83 * 5 7	729:40	47,261.97				
8	Pinkspar Prior to famine of 1899-1900	43 ,065 [,] 3 6	6,789.96	49,855-32	214.71	50,070 08	1.88	507-6		
	At revision	40,777.05	8,144.98	48,922 03	419-58	49,341 61	•••	4 11		
	(At former settlement (1885-87).	61.340 43	1 5 - 8 9	64,355-82	677-99	64,9 \$ 3• 8 1	•••			
9	Bhandera Prior to femine of 1899-1900	55,9 65- 24	12,864 77	69,830.01	178.90	69,008-91	5.52	32 .6		
	At rovision	55,890·9 2	12,249 02	68,139-94	609·79	68,649 73	•••	ĺ		
	At former settlement (1885-87).	530,687-32	5,669.42	536,356 [.] 74	15,308-29	551,66 5:0 3	•			
	Total Prior to famine of 1899-1900	460,918-44	126,630.87	587,549 41	11,189.73	598,739.14	31-1 8	540.3		
	At revision	465, 5 62·29	118,740.05	584,802*34	11,675.55	595,977·89	•••	•••		
			<u></u>							
							D	HAMTAI		
1	Sanjeri { At former settlement (1885-87).	28,939 ·94		28,939-94	2,219-61	31,159'55				
-	At attestation (1901-02)	20,071.04	11,854.90	31,425-94	1,514.00	32,989 [.] 94	8 ·73	13,657-21		

į

the present and former Settlements.

ED AREA	h.			AB	EA IRBIGAT	ED.				
rub-jungle 12d grass.	Under water, hill and rock, and arca covered by buildings and roads, &c.	Total area unoccupied.	Total area,	From tanks.	From other sources.	Total.	Number of irrigation wells.	Numbor of artificial tanke.	Number of ploaghs,	Number of plough- cattle.
10	11	12	13	14	15	16	17	18	19	20
AHSIL. Aores.	Acres.	Acres,	Acres.	Acres.	Acres.	Acres.				
***	1.4	20,936·8 3	95,793 [,] 18		•••				2,582	9,905
13,611.93	4,827.80	18, 4 41·10	99,330-71	1,693-28	342 [.] 26	2,0 35·54	184	197	2,498	9,371
		18 ,385 [.] 08					131	206	2,563	8,992
		28,309.66	103,709-22						2,872	10,926
20,016.36	5,272:21	25,288.74	108,097.17	2,627.01	1,263-70	3,890-71	158	257	2,356	9,1 36
		27,283 87					251	264	2,344	9,455
		22,777·81	86,992.09						2,664	9,971
14,862.71	7,066'44	21,943.64	90,061 77	2,646-36	250-97	2,897 38	118	250	2,535	9,833
		22, 104-8 9	•()	ESS		R.	119	25 0	2,535	9,883
		24,484.46	98,010'04	- Meta		5		513	3,296	11,588
17,159-42	4,526 82	21,687 44	102,736.11	4,581.84	625-80	5,157.20	41	\$03	2,770	10,526
		21,676 [.] 33			641		80	825	2,978	10,855
		12,955.02	54,202'78	14	11 11 1				1.673	6,906
8,724-67	2,763.77	11,491.88	57,629.74	3, 442:2 5	 171-99	3,614-24	 90	234	2,073	7,689
		11,316.69		0,994 20	1/1/00	5,019.24	90	234	2,073	7,689
		10.487 74			No. 1000					
 7,568 [.] 74	 2,144 [.] 57	9,715.54	51,583·46 54,853·67		대학교학적			289	1,829 1,714	7,284 7,571
1,000 / 1	2,198.01	9,658.90	09,803'07	2,528.79	175.79	2,704-68	157 157	203	1,714	7,571
		ŕ		***						
		18,287.53	87,447-58				- 11		3,017	11,230
11,595.72	6,054 86	16,651 77 16, 48 7 98	92,170 [.] 59	2,358-52	248.51	2,637-03	160	249	2,686	9 ,956 9,700
***			***				191	290	3,030	
•••	•••	10,702 82	57,964-79		•••				1,554	7,441
4,766-39	5,891.70	10,607-53	60,677-56	784-74	199-81	984-55	230	72	1,765	6,770
		11,335-95	•••		· •••	***	191	95	1,858	6,194
•••		11,315-26	76,249-07		•••				2,035	9,401
7,835 52	3,274-83	11,148-31	80,157 [.] 22	1,217.55	186 74	1,404-29	128	98	2,363	8,005
····		11,507-49			•••		175	109	2,743	8,008
400		160,287-13	711,902.16						21,712	84,652
06,141-46	40,262-50	146,975-40	745,714-54	21,859-94	3,465·68	25,325-47	1,286	1,895	20,639	78,847
•••	•	149,736-65					1,384	2,006	21,813	77,292
AHSIL.	• ••••••••••••••••••••••••••••••••••••									
	1	07 003 0F								4 ORX
*** 33 600.00		27,898.25	59,057.80		6 8 - 8			•••	1,162	4,975
11,562-38	5,146-11	3 0,369·41	63,809-85	118.00	170 46	283-46	90	15	1,233	3,699

			Held by M.	LQUZABS.		HELD BY MAL	IL-MARBI
Serial No.	Name of Assessment Group.	As sir,	Other than sir.	Total.	Area of total leased out.	Number of holdings.	Åres.
1	2	8	•	5	6	7	8
							DBI
		Acres.	Acres.	Acres.	Acres.		Aores
1	At Mr. Hewitt's settlement			19,506.72			496
1	(1865-69). Dhamda { At former settlement (1885-87). Prior to famine of 1899-1900 Attravision	16,463 32 16,427 91	7,137·59 10,139·63	17,698·39 23,600·90 26,567·54	1 ,486-83 1,303-76	 187 97	496 427 42 7
	(At Mr. Hewitt's settlement (1965-69).	•••		12,491-86			171
2	Nankatti { At former sottlement (1885-87). Prior to famine of 1809-1900 At revision	15,119 71 15,113 76	5,638 25 10,174 98	17,938-69 20,757-96 25,238-74	 510-28 485-59	 47 47	195 258 253
	(At Mr. Hewitt's settlement (1865-69),			12,749.82			692
3	Drug At former settlement (1885-87). Prior to famine of 1899-1900 At revision	16,390.68 15,335.44	4,288-09 7,305-29	17,230-75 19,678-77 22,640-73	1,082-84 1,080-68	 149 145	754 681 679
	(At Mr. Hawitt's settlement (1865-67).	E B		15,276-61	•••		840
4	Bhilai At former settlement (1885-87). Prior to famine of 1899-1900 At revision	16,243 58 16,311 06	4,975·40 7,258·77	18,088-67 21,218-98 23,567-83	1,073-15 1,062-82	 92 83	606 757 756
	(At Mr. Hewitt's settlement (186569).	}))	TLAY	8,373-13	. "		815
5	Patan Atformer settlement (188587). Prior to famine of 1899-1900 At revision	7,260-75 6,993-23	2,610·57 3,482·71	8,254-83 9,871-32 10,475-94	525-39 608-95	 64 64	2 30 229 229
	At Mr. Hewitt's settlement (1865-69).			9,564 76	***		434
6	Banchirai. { At former settlement (1855-87). Prior to famine of 1899-1900 At revision	8,441·27 8,327·54	2,587·78 4,023·85	9,287-76 10,979-00 12,351-39	351-88 361-80	 35 85	430 887 887
1	At Mr. Hewitt's settlement (1865-69).			15,105-83	•		186
7	Arjunda { As former settlement(1885-97). Prior to famine of 1899-1900 At revision	14,310-26 14,300-29	3,232-79 5,950-28	16,251.65 17,543.05 20,250.52	1,018 73 1,252 63	 54 59	108 90 90
	(At Mr. Hewitt's settlement (1865-69).			11,926-32			859
8	Pinkapar. { At former settlement (188587). Prior to famine of 1899-1900 At revision	9,381 23 9,347 78	2,759-31 4,738-91	10,229:19 12,140:53 14,086:09	1,814-85 1,812-54	 42 38	220 240 239
	At Mr. Hewitt's settlement (1865-69).			13,224 42			1,489
9	Bhanders { At former solutionent (1885-87) Prior to famine of 1890-1900 At revision	10,23 3 ·30 10,154·17	4,221 08 7,247 78	10,523:98 14,454:38 17,401:95	618 98 583 82	 110 123	970 897 878
	At Mr. Hewiti's settlement (1865-69).	····		118,209.47	•···		4,368
	Total { At former settlement (188567) { Prior to famine of 1899-1900 [At revision	112,844·01 112,811·18	87,400 80 60,319 55	125,453-85 150,244-89 172,630-73	 7,932-87 7,892-58	750 686	4,008 3,966 8,944
	-					DH	AMTA
	(At Mr. Hewitt's settlement) (1865-69).			11,034.96			26
1	Sanjari { At former settlemont(1885-87). At attestation (1901-02) At revision	 3,259 00 3,259 00	2,299 97 2,710 90	8,730-36 5,558-97 5,969-90	845-48 345-43		20- 11- 11-

STATEMENT V.-Details of Holdings at th

present and former Settlements(Concld.)	ļ
---	---

Bavano	1- 1 819.	ABSOLUTI	-OCCUPANCY.	Ooc	UPANOY.	Held by tenants of		y Obdinaby lants.	HELD BY TEN	PRIVILEGED	
Number of holdings.	Å788.	Number of holdings.	Ares,	Number of holdings.	Atea.	superior class in ordinary tenant right,	Number of holdings.	Åres.	As grant from malguzar.	In lien of service.	Total oscupied area.
9	10	11	12	13	14	15	16	17	18	19	20
TAHSIL											
)	Acres.		Acres.		Acres.	Acres.		Acres.	Acres.	Acres.	Acres.
	100-00		10,865-95		2,295-21			2 4,282-99	521	34	58, 068 59
 4 4	88:09 72:57 72:57	 331 332	7,056 [,] 99 6,080 [,] 23 6,986 06	1,189 1,113	27,921-00 24,715-97 21,921-34	5,803 [.] 92 5,896 [.] 05	 1.494 1,359	20,455 79 19,310 39 19,254 63	1,839 575 52 542 28	95 302-22 297 80	74.850 30 80,889-61 80,965-65
	21.07		10,478.62		2,388.7 0			28,679-92	522:	22	54, 746 *81
 1 1	35-83 13-44 18-44	 593 63 4	8,588-91 8,079-39 7,688-18	2,063 1,731	82,131-52 32,158-26 26,748-67	5,72492 6,867-51	 1,357 1,209	15,690 93 14,767 43 13,885 29	640·77 761·43	35 412:46 366:24	75, 8 99 -5 8 82,808-43 80,813-30
	674		12,243 29		5,201-17		•••	21,717 38	8921	01	52,89 6 -64
 	 	656 673	9 934 60 9 261 68 9,010 39	1,521 1,438	19, 538 ·72 19,011·45 16,797·15	4.394·49 4,480·62	1, 419 1,216	16,311-26 14,401-30 13,712-00	444 455•44 973•15	18 293-86 203-44	64,214-28 68,118-13 67,967-38
	7:49		11,012 92	2	2,718.89		3	24,585.98	5841	34	54,526 [,] 76
 	 	 767 777	9,497 [,] 22 9,134 [,] 34 8,960 [,] 22	2,078 1,954	27,872-04 28,356-08 26,392-30	6,919 [.] 88 7,362 [.] 94	 1,448 1,822	17,025-21 13,606-45 12,871-50	506 (784 91 845 60	08 271:30 303:87	78,545-58 81,048-67 81,059-78
			8,270-22		803 70			13,993 88	480 9	99	32,187 ·6 6
 	 	 671 638	7,742 :22 7,722:78 7,552:80	1,235 1,236	15,747-61 16,517-05 16,064-63	3,822/31 3,989/06	1,151 1,024	8,654.87 7,331.09 7,377.65	6177 435:94 423:77	79 208-20 199-55	41,247-76 46,188-41 46,318-06
•••			8,257-25		682.00	OZANEK.		16,403-66	124	87	85,467-20
 	••• •••	436 481	7,158 64 7,363 03 7,299 98	 1,182 1,136	16,523-06 17,368-36 16,419-40	2,976 16 2,701 27	 790 649	7.404-53 6,258-49 5,642-46	241: 281:01 270:68	30 124-96 122-47	41,046 72 45,138 13 45,194 77
	•••		12,401.76		6,614-81			24,219-81	388·1	96	58,892 94
 	 	 919 894	11,742 43 11,842 34 11,329 51	 1,719 1,680	23,377 88 24,835 24 23,398 31	6,482.13 5,543.71	1,674 1, 441	16,952 ⁻ 12 14,829 ⁻ 43 14,206 29	7824 53141 52977	36 864-66 833-71	69,160 05 75,518 82 75,682 61
	•••		10,059-44		5,111-94			16,782-61	51 1-i	98	44,551.42
••• ••• •••	•••• •••	 479 480	7,522 42 7,384 88 7,096 54	964 805	18,987 21 13,778 17 12,483 30	2,528·44 2,817·62	1,157 1,028	14,600 38 13,413 15 12,034 71	701-1 445-38 436-95)1 139·73 146·44	47,261.97 60,070 03 49,841.61
•	•••		17,517-45		7,574.60			19,84 4 ·93	2681		59,019·32
 	 	767 839	12,788-26 12,538-61 12,099-74	1,014 974	17,895-02 17,637-76 15,480-93	3,731:07 4,411:66	1,674 1,474	22,370-12 19,149-96 17,721-57	396-1 469-97 468-74	15 234:33 186:25	04.9 83 -81 69,008-91 68,6 1 9-73
	131.56		101,106 90		38,891.86			190,511·16	3,540		451,257-94
 5	123-92 86-01 86-01	5,619 5,698	82,031-69 79,402-28 76,972-48	19 915 12,127	194,984 06 194,278 94 175,705 98	40,782 81 43,070 44	12,064 10,721	139 ,465 -18 123,066-69 116,706-10	5,597 4,620·35 4,642·37	32 2,291•72 2,219 £5	551,665 08 598,739•14 595,977•89
"AHSII		╉╾╼╾┶╍╌╴ ┃	 								
			4,261-53		1,153.75			10 ,402 -50	39 °(28,918 50
 9	24:37 24:48 84:48	86 83	2,136·73 1,828·02 1,7 1 9·99	278 247	9,871·42 7,031·93 6,464·24	9.450°06 2,291°26	 988 940	16,014 [.] 64 15,529 [.] 44 14,811 [.] 40	861 1 591 00 618 96	115 [.] 00 115 [.] 00	31,159-55 32,939-94 31,386-25

1 Dhs Incid 2 Nani Incid 3 Dru Incid 4 Bhill Incid 5 Pata 5 Pata 1ncid 6 Ran Incid 6 Ran Incid 7 Arju Incid 8 Pinl Incid 9 Bha	Name of Assessment Group. 2 hamda cidence per acro		Malik-makduza. 3 Rs. s. p.	Absolute- occupancy. 4 DRUG 7	Оссарансу. 5	TENANTE. Ordinary. 6	Occupsnay- cum-ordinary. 7	Total.
1 Dhs Incid 2 Nani Incid 3 Dru Incid 4 Bhill Incid 5 Pata 5 Pata 1ncid 6 Ran Incid 6 Ran Incid 7 Arju Incid 8 Pinl Incid 9 Bha	2 hamda cidepce per acre		3	necupuney.			cum-ordinary.	Total,
1 Dha Incid 2 Nan Incid 3 Dru, 1 ncid 4 Bhil Incid 5 Pata Incid 6 Ran Incid 6 Ran Incid 7 Arju 1ncid 8 Pint Incid 9 Bha	bamda cidepce per acro				5	6	7	
Inci Nau Inci Nau Inci Nau Inci Nau Inci Rau Inci Rau Inci Rau Inci Rau Inci Rau Inci Rau Inci Rau Inci S Pata Inci Inci S Pata Inci Inci Inci Inci Inci Inci Inci Inci	cidence per acre		Rs. a. p.	DRUG 7			•	8
Inci Nau Inci Nau Inci Nau Inci Nau Inci Rau Inci Rau Inci Rau Inci Rau Inci Rau Inci Rau Inci Rau Inci S Pata Inci Inci S Pata Inci Inci Inci Inci Inci Inci Inci Inci	cidence per acre		Rs. a. p.)	TAHSIL.			
Inci Nau Inci Nau Inci Nau Inci Nau Inci Rau Inci Rau Inci Rau Inci Rau Inci Rau Inci Rau Inci Rau Inci S Pata Inci Inci S Pata Inci Inci Inci Inci Inci Inci Inci Inci	cidence per acre			Ка. в . р.	Ra. a. p.	Ra. s. p.	Rs. s. p.	Re. a. p
2 Nan Inci 3 Dru 4 Bhil Inci 6 Pata Inci 6 Ran Inci 7 Arju Inci 8 Pint Inci 9 Bha	·	•••	226 9 3	4,500 9 2	1,137 4 1	13,523 3 8	14,665 7 9	19,166 0 11
Incia S Dru, Incia S Dru, Incia S Pata Incia S Pata Incia	aukatti		073	068	0711	0 8 11	U 810	081
 S Drug Incio Bhil Incio Pata Fata Incio Rano Incio Incio<!--</td--><td></td><td>•••</td><td>87 13 7</td><td>4,398 6 6</td><td>1,036 13 3</td><td>15,210 15 5</td><td>16,247 12 8</td><td>20,646 1</td>		•••	87 13 7	4,398 6 6	1,036 13 3	15,210 15 5	16,247 12 8	20,646 1
4 Bhil Incid 5 Pata 1ncid 6 Ram Incid 7 Arju Incid 8 Pinl Incid 9 Bhai	cidence per acre		082	069	0 6 11	086	084	071
4 Bhil Incia 5 Pata Incia 6 Ban Incia 7 Arju Incia 8 Pinl Incia 9 Bhai	rug		223 11 7	5,150 3 2	2,763 9 10	11,085 12 0	13,849 5 10	18,999 9
Jacie 5 Pata Incie 6 Ram Jacie 7 Arju Incie 8 Pint Jacie 9 Bha	oidencs per acro	•••	060	069	0 8 6	082	088	07
5 Pata Incia 6 Ram Incia 7 Arju Incia 8 Pint Incia 9 Bha	ilai		101 11 6	4,018 9 8	1,313 15 2	11,776 1 3	13,090 0 5	17,108 10
6 Ram Incid 7 Arju Incid 8 Pint Incid 9 Bha	cidence per acre		049	0 5 10	079	078	078	07
 6 Ram Inci 7 Arju Inci 8 Pini Inci 9 Bhas 	tan		102 7 2	4,230 14 10	518 3 2	12,719 13 8	13,233 0 10	17,468 15
Inci 7 Arju Inci 8 Pinl Inci 9 Bha	cidence per acre	•••	052	082	0 10 8	0 14 7	0 14 4	0 19
7 Arja Inci 8 Pint Inci 9 Sha	anchirai	•••	31 7 3	3,630 8 2	341 2 10	10,340 12 6	10,681 15 4	14,312 7
8 Pinl Inci 9 Bha	cidence per acre	••	012	070	080	0 10 1	0 10 0	09
8 Pinl Inci 9 Bha	janda	•••	55 10 6	5,098 10 2	3,474 10 5	12,554 2 0	16,028 12 5	21,127 6
9 Bha	cidence per acre	•••	055	067	085	084	084	071
9 Bhai	nkspar		122 5 10	4,176 12 0	2,619 13 6	9,471 1 6	12,090 15 0	16,267 11
-	cidenco per acre		055	068	083	090	0 8 10	08
Inci	andera		530 7 3	7,613 9 6	4,053 11 4	12,132 11 4	16,186 6 8	23,800 0
	cidence per acre		058	0611	087	099	095	08
	Tota)		1,482 3 11	42,8 18 1 2	17954 3 7	1 09 819 9 4	1,26,073 12 11	1 69 801 14 1
	10401			0 6 9	0 8 3	0 9 2	0 9 0	0 8
	Incidence per acre			₽₽₽₩₩₽₽₽	I TABSIL			
1 San	Incidence per acre		4 10 4	845 6 0	269 12 0	2,50 6 1 10	2,774 1 3 10	8,620 8 1
Inci	Incidence per acre	441	a ⇒10 481			-,	-,,, = 40 10	

				18 /	T FORMER SET	TLEMENT (188	1587).					
Berial	Name of Assessment Group.	:		Temants,								
No.			Malik-wakbuza.	Absoluto-accu- psney.	Occupancy.	Ordinary.	Occupanoy-cum- ordinary.	Totel.				
1	3	_	3	4	ō	6	7	8				
				DRUG	TAHSIL							
			Ra, a. p.	Rs. s. p.	Rs. s. p.	Rs. a. p.	Rs. *s. p.	Rs. a. p.				
1	Dhamda		210 4 B	3,483 15 9	15,301 \$ 10	11,851 7 6	27,212 11 4	30,696 11 1				
	lacidence per scr o		069	0711	0 8 10	093	090	0 8 11				
2	Naukatti	:	64 14 6	4,590 1 2	18,208 14 8	9,735 15 11	27,914 14 7	32,534 15 \$				
	Incidence per acre		054	087	091	0 9 11	094	0 9 8				
8	Drag	:	294 11 9	6,196 2 I	11,778 14 6	9,937 5 4	21,711 3 10	26,907 5 11				
	Incidence per acro		063	084	098	099	098	095				
4	Bhilai		110 3 4	4,774 8 2	15,496 11 10	10,368 11 0	25,865 6 10	50,689 15 0				
	Insidence per sero		0 2 11	081	0 8 11	099	098	090				
5	Patan		81 5 7	4,379 10 2	11,325 8 3	7,594 7 10	18,920 0 0	23,299 10 2				
	Incidence per acre		058	091	जयने 11 6	0140	0 12 5	0 11 7				
6	Ranchirai		285 15 5	3,986 12 9	11,382 5 10	5,661 11 2	17.044 2 0	21,030 14 9				
	Incidence per acro		0108	0 8 11	011 0	0 12 3	011 5	0 10 16				
7	Arjonda		\$9 13 0	5,948 2 7	12,889 C 11	9,868 11 1	22,757 2 0	29,705 4 7				
	Incidence por nora		062	081	0 8 10	094	09 0	0810				
8	Piakapar		87 3 9	3,885 G O	8, 43 5 6 D	9,450 16 5	17,880 5 5	21,771 11 5				
	Incidence por acre		065	083	098	010 4	0100	098				
9	Bhandera		369 14 8	6,729 5 0	10,241 11 6	13,255 9 4	23,497 4 10	30,226 9 10				
	Incidence por scre		0 6 1	085	092	096	094	091				
	Total]	1,544 6 5	42,973 15 8	1,15,114 4 3	87,724 14 7	2,02,839 2 10	2,45,813 2 6				
	lueidonce per acro		062	085	095	0 10 1	098	095				
	A 1 -		.	DHAMTAR	j							
1	Ta : J	•••	464	580 3 0	2,741 2 0 0 4 5	4,485 13 6	7,226 15 6	7,807 2 6				
	Incidence per acre		032	044	V 4 0	049	0 6 8	047				

.

Serial No,				AS PAID PRIOR TO FAMINE OF 1899-1900.								
No,	Name of Assessment Group.					Tehants.						
		·	Malik-makduza.	Absoluto-occa- pancy.	Oceupancy.	Ordinary.	Occuparcy-cum- ordinary.	Total.				
ر . ا	2		3	4	5	6	7	8				
,,,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				DRUG	TAHSIL.							
			Rs. s. p.	R∎. a. p.	R#. a. p.	Rs. s. p.	Rs. s. p.	R6. 8.				
1	Dhamóa		190 1 7	3,079 9 7	14,154 13 1		29,016 11 8	82,090 6 1				
	Incidence per nere		071	081	092	099	095	0 9				
8	Nankatti		69 2 10	4,832 4 5	18,288 7 6	10,904 9 1	29,193 0 7	83,525 5				
	Incidence per acre	477	044	087	0 0 1	0 8 11	0 9 0	09				
8	Drag	141	243 12 0	5,046 1 7	12,137 10 8	12,482 0 4	24,619 11 0	29,665 12				
	Incidence per acre		050	089	0 10 3	0 10 8	0105	0 10				
4	Bhilai		118 3 11	4,651 8 10	16.116 11 5	12,445 14 3	28,562 9 8	39,214 \$				
•	Incidence per acre		0 2 6	0 6 2	0 9 1	099	095	0.9				
				सन्धमेव								
5	Patan		77 11 11	4,324 15 2	11,782 3 7	9,651 7 10	21,439 11 5	25,758 10				
	Incidence per acre		055	090	011 5	0 13 11	0125	0 11				
6	Ranchirai		284 10 8	2,956 7 9	11,771 10 7	7,447 0 5	19,218 11 0	23,176 2				
	Incidence per acru		0119	087	0 10 10	0 13 10	0 11 10	0 11				
7	Arjunda		40 7 2	5,911 12 8	13,882 11 2	12,129 14 2	25,712 9 4	31,624 6				
	Insidence per acre		072	080	089	097	091	08				
8	Pidkapar		83 4 4	9,C65 6 10	8,285 6 2	10,641 9 3	18,926 15 5	22,612 6				
	Incidence per acro)	0 5 6	0 8 0	0.98	0 10 8	0 10 4	0 9				
	·											
	Bhanders.		352 8 11	6,414 14 5	9,980 1 7	14,67 3 7 5	24,653 9 0	51,068 7				
	Incidence per acro	"	0 6 8	082	091	0104	0910	0 9				
	Total		1,459 9 11			1,05,237 12 11						
	Incidence per acre		0 6 11	084	097	0 10 3	0 9 11	0 9				
1	Sabjari		DHAMT 5 0 4	ABI TAHSII 491 6 6	, ATTESTAT 1,934 4 8 (TION YEAR (1 5,181 1 10 j	901-02). 7,115 6 6	7,606 13				
	Incidence per acre		073	0 4 4	045	0 4 7	0 4 7	0 6				

			AT BEVISION.															
urial						Texants.												
No.	Name of Assessment Group.	Malik-makbuza.			Absolute-occu- pancy.	Oscupancy.	Ordinsry.	Occupancy-cum- ordinary.	Total.									
1	2		3		4	5	6	7										
						DEUG !	FAHSIL.											
			Rs. 6	. p).	Re. 8, p.	Rs. a. p.	Rs. s. p.	Rs. a. p.	Rs. s. p.								
1	Dhamda		190	1 4	4	3,040 15 9	12,479 6 7	15,061 4 4	27,540 10 11	30,581 10 8								
	Incidence per scre		0	7 1	1	082	091	097	094	093								
8	Nankatti		69	2 1(0	4,150 7 11	14,635 0 6	11,047 8 2	25,682 8 7	29,883 0 6								
•	Insidence per acre	•••	0	4 (4	0 8 8	0 8 9	0 8 11	0 8 10	0 8 10								
3	Drug	•••	245	0 1	9 0	4,915 9 8	10,678 14 6	11,779 0 7	22,457 15 1	27,378 8								
-	Incidence per acre			5 1		089	0 10 2	0 10 4	0 10 8	0 9 11								
4	N9 11 /					4,619 1 10	14,850 2 10	12,139 8 9	26,969 6 7	31,608 8 f								
1	Bhilai Incidence per acre		117 1	2 (9,619 I 10	14,800 2 10	097	093	0 9 1								
					Ĭ	सन्यमेव उ												
5	Patan		77 1	11 11	1	4,242 4 8	11,117 15 11	9,710 11 1	20,828 11 0	25,070 15 3								
	lucidence per acre		0	5	5	090	011 1	0138	0 12 2	0116								
6	Ranchirai	•••	284	3	1	3,923 15 3	11,099 5 8	6,892 12 11	17,992 2 2	21,916 1 1								
	Incidence per acre		0 1	n :	9	087	0 10 10	013 3	0 11 8	0 10 11								
7	Arjanda		40	7	2	5.603 2 0	12,652 10 10	11,643 0 3	24,295 11 1	29,897 13 1								
	lucidence per uere		0	7 :	2	0 7 11	088	095	0 9 0	085								
8	Pinkapar		83		0	8,576 15 6	7,382 14 10	10,017 3 11	17,400 2 9	20,977 2								
0	Incidence per acre			5		0 8 1	096	0 10 9	0 10 2	0 + 9								
	Bhandera						8,655 3 11	18,752 10 2	22,407 14 1	28,5 2 7 5 5								
8	Incidence per acre			.6		6,119 7 2 0 8 1	0 8 11		0 9 6	0 9								
					_													
	Total Incidence per acre		1,460	91 51	1	40,190 14 11 0 8 4	1,03,551 11 1	1,02,043 7 2 0 10 3	2,05,595 2 3 0 9 10	2,45,786 1 1 0 9 (
	tacutance her were	•••	ļ`		_													
1	Sadjari	•••	5	0	4	DHAMTAI 468 5 6	RI TAHSIL. 1,781 9 8	4,795 0 10	6,576 10 6	7,045 0								
-	Incidence per sore			7		044	045	047	0 4 7	0 4 1								

			AS PROPOSED.													
Serial				TENANTS.												
No.	Name of Assessment Group.		Malik-makb	123.	Absolute-occu- pancy.	Occupancy.	Ordinary.	Occupancy-cum- ordinary.	Total.							
1	2		3		4	5	6	7	8							
					DRUG '	FAHSIL.										
			Rs. a.	p.	Rs. a. p.	Rs. a. p	. Rs. a. p.	Rs. a. p.	Rs. a. p.							
1	Dhamda		213 0	0	3 ,56 5 8 0	14,134 2 0	16,510 7 0	30,644 9 0	34,210 1 0							
	Incidence per acre		08	0	096	0 10 4	0 10 6	0105	0 10 4							
2	Nankatti	•••	106 7	0	4,248 4 0	15,779 2 (12,263 5 0	28,042 7 0	32,290 11 0							
	Incidence per acre	•••	06	9	0 8 11	094	0 9 11	098	097							
	.*				5,484 8 0	11,312 14 (12,643 12 0	23,956 10 0	29,441 2 0							
3	Drug Incidence per acre		275 8 0 6		9,484 8 0 0 9 9	0 10 \$		0 10 11	0 10 8							
	There is all a		ŬŬ	Ū		14										
4	Bbilai		203 2	0	5,236 8 0	16,027 10 0		28,898 14 0	34,135 6 0							
	Incidence per acre	•	04	4	094	099	0 10 2	0 9 11	0 9 10							
5	Patan	•••	91 14	0	5,443 4 0	13,407 4 0	10,599 7 0	24,006 11 0	29,449 15 0							
	Incidence per acre		06	5	0116	0134	0 14 11	0140	013 €							
6	Ranchirai		241 12	0	4,907 0 0	12,649 4 0	6,948 14 0	19,598 2 0	24,505 2 (
	Incidence per acro		0 10		0109	0124		0128	012 1							
									00.000.14							
. 7	Arjunda		33 8	ĺ	6,564 4 0	14,139 0 0		26,332 10 0 0 9 9	32,896 14 0 9							
	Incidence per acre	•••	05	11	093	098	0 9 11	0 5 5								
8	Pinkapar		106 0	0	4,220 8 0	8,154 2 0	10,546 2 0	8,700 4 0	22,920 12							
-	Incidence per acre		07	1	096	0 10 5	0 11 4	0 10 11	0 10							
9	Bhandera		476 2	0	6,835 6 0	9,440 2 0	14,769 4 0	24,209 6 0	31,064 1 2							
	Incidence per acre		08	8	091	099	0 10 8	0104	0 10							
	Total		1,747 5	0	46,525 2 0	1,15,043 8 0	1,09,346 1 0	2,24,389 9 0	2,70,914 11							
	Incidence per acre		07	1	0 9 8	0 10 6	0 10 11	0 10 8	0 10							
	,				DHAMTAR	I TAHSIL.										
1	Sanjari		50	4	468 5 6	1,781 9 8	1,795 0 10	6,576 10 6	7,045 0							
i	Incidence per acre		07	3	044	045	047	047	04							

Same of Assessment Grou 2 mda dence per acro katti dence per acro 5	ар. 	Malik-makboza. 3 Bs. a. p. 213 0 0	Absolute-oeca- pancy.	Ta Occupancy. 5 DRUG 9	DARTS. Ordinary. 6	Decupancy-oum- ordinary.	Total ,
2 Inda dence per acro katti dence per acro		8 Bs. s. p.	рапеу.	5	6	ordiasry.	
unda idence per acro katti idence per acro	•••	Bø. s. p.		 		7	8
dence per acre katti dence per acre	•••	•	Bs. s. p.	DEUG			
dence per acre katti dence per acre	•••	•	Bs. a. p.		LTHRIT'		
dence per acre katti dence per acre	•••	\$1 3 0 0		Bs. a. p.	Rs. a. p.	Bs. a. p.	Bs. a.
katti douco por acro			3,565 8 0	14,058 10 0	16,481 7 0	80,540 1 0	36,105 9
dence per acre	•••	080	096	0 10 3	0 10 6	0 10 6	0 10
·		108 7 0	4,275 12 0	15,780 0 0	12,191 7 0	27,921 7 0	32,197 3
8		069	0 8 11	095	0 9 10	097	0 9
		275 8 0	5,454 8 0	11,209 13 0	12,620 6 0	23,920 2 0	29,404 10
dence per acre		0 6 6	099	0 10 9	011 1	0 10 11	0 10
lai		188 10 0	õ,236 8 O	16,027 10 0	12,871 4 0	28,898 14 0	84,185 6
denco per scre		040	094	099	0 10 2	0 9 11	093
a	•••	91 14 0	5,448 6 0	13,359 6 0	10,598 11 0	23,952 16 0	29,896 3
dence per acte	**	065	0116	013 4	0 14 11	014 0	0 18
chirní		241 12 0	4,874 12 0	12,582 8 0	6,917 10 0	19,600 2 0	24,374 14
donce per scre	.,	0100	0109	012 3	0 18 3	0 12 7	0 12
nda		88 8 0	6,564 4 0	14,108 0 0	12,190 2 0	26,298 2 0	32,963 6
dence per sere		0 5 11	098	0 9 8	0 9 11	099	09
tapar		106 0 0	4,207 8 0	8,144 2 0	10,544 2 0	18,688 4 0	22,895 12
dence per acre		071	096	0 10 5	011 4	0 10 11	0 10
ndera		468 2 0	6,855 6 0	9,440 2 0	14,769 4 0	24,209 6 0	31,064 12
dence per acre		086	091	099	0 10 8	0 10 4	0 10
	,	1,724 13 0	46,507 6 0	1,14,750 0 0	1,09,1 79 8 0	2,23,929 5 0	2,70,436 11
Total		070	0 9 8	0 10 5	0 10 11	0 16 8	0 10
Total lucidenos por acre							
		504	468 5 6			6,578 10 6	7,045 O 0 6
d	ence per acre dera ence per acre Total	ence per acro dera ence per acro Total lucidence por acro tri	cnee per acre 0 7 1 dera 468 2 0 ence per acre 0 8 6 Total 1,724 13 0 lucidence per acre 0 7 0 stri 5 0 4	cnce per acre 0 7 1 0 9 6 dera 468 2 0 6,855 6 0 9 1 ence per acre 0 8 6 0 9 1 Total 1,724 13 0 46,507 6 0 Incidence per acre 0 7 0 9 8 ari 5 0 4 463 5 6	cnce per acre 0 7 1 0 9 6 0 10 5 dera 488 2 0 6,855 6 0 9,440 2 0 ence per acre 0 8 6 0 9 1 0 9 9 Total 1,724 13 0 46,507 6 0 1,14,750 0 0 lucidence per acre 0 7 0 0 9 8 0 10 5 tri 5 0 4 469 5 6 1,781 9 8	cnce por acre 0 7 1 0 9 6 0 10 5 0 11 4 dera 468 2 0 6,855 6 0 9,440 2 0 14,769 4 0 ence per acre 0 8 6 0 9 1 0 9 9 0 10 8 rotal 1.724 13 0 46,507 6 0 1,14,750 0 1,09,179 5 0 lucidence por acre 0 7 0 9 8 0 10 5 0 10 1 109,179 5 0 1 1,09,179 5 0 1 10 1 1 10 1 1 10 1<	cnce per acre 0 7 1 0 9 6 0 10 5 0 11 4 0 10 11 dera 468 2 0 6,855 6 0 9,440 2 0 14,769 4 0 24,209 6 0 ence per acre 0 8 6 0 9 1 0 9 9 0 10 8 0 10 4 Total 1,724 13 0 46,507 6 0 1,14,750 0 0 1,09,179 5 0 2,23,929 5 0 Incidence per acre 0 7 0 0 9 8 0 10 5 0 10 11 0 10 8 tri 5 0 4 409 5 6 1,781 9 8 4,795 0 10 6,578 10 6

A CONTRACTOR OF A DESCRIPTION OF A DESCRIPANTE A DESCRIPANTE A DESCRIPANTE A DESCRIPTION OF A DESCRIPTION OF

		AS ANNOUNCED AT RE-SETTLEMENT.													
Serial No.	Nome of Assessment Cause		TRNANTS.												
	Name of Assessment Group.	Malik-makbuza	Absolute-occu- pancy.	Occupancy.	Ordinary.	Occupancy cum ordinary.	Total.								
1	2	3	4	б	6	7	8								
	1			DRUG	TAUSIL										
		Ra a. p.	Rs. s. p.	Ba. 6. p.	Rs. a. p.	Bs. s. p.	Rs. a.								
1	Dhamds	212 4 0	3,516 6 0	13,870 14 0	16,195 7 0	30,066 5 0	83,582 11								
2	Nanksti	. 106 6 0	4,266 12 0	15,777 2 0	12,633 6 0	28,310 8 0	32,577 4								
8	Drag	279 4 0	5,485 14 0	10,998 2 0	12,583 8 0	23,581 10 0	20,047 8								
4	Bhilai	187 4 0	5,236 2 0	16,044 8 0	12,864 0 0	28,908 8 0	34,143 10								
5	Palan	97 10 0	5,483 6 0	13,029 12 0	10,356 11 0	23,386 7 0	28,819 13								
6	Kanchirsi	241 12 0	4,861 6 0	1 2 ,135 12 0	6,65 % 8 0	18,790 4 0	23,651 10								
7	Arjaads	33 8 0	6.552 14 0	14,070 0 0	12,277 6 0	26,347 6 0	32,900 4								
8	Piakspar	105 0 0	4,196 14 0	8,211 2 0	10,5 84 6 0	18,795 8 0	22,993 6								
8	Bbandera	48 2 0	6,840 6 0	9,483 10 0	14,893 4 0	24,315 14 0	31,158 4								
	Total	1,732 2 0	46,369 0 0	1,13,619 14 0	1,08,882 8 0	2,22,502 6 0	2,68,871 6								
				DHAMTARI	TAHSIL.	, A									
1	Sanjari	504	468 5 6	1,777 9 8	4,811 0 10	6,588 10 6	7,057 0								

STATEMENT	VI.—Details of	' Malik-makbuzas'	and Tenants'	Payments.—(Contd.)
-----------	----------------	-------------------	--------------	--------------------

		COMPABE AS GIVEN BY UNIT RATES.															
fial 0.	Name of Assessment Group.			Tenants.													
0.		X	lalik-ma	ıkbu	725	Absolute panc		Occupancy.		Ordinary.	Occupancy-cum- ordinary.	Total.					
1	2		S			4		5		6	7	8					
_								DI	₹ŪĠ	TAHSIL							
1	Dhamda .		Rs. 225		-	Rs. 4,740	∎. р. 70	Rs. 16,985	a p. 90		Rs a. p. \$5,042 10 0	Rs. s 39,783 1					
1	Naukatii .		132	12	0	4,892	7 0	16 837	0 0	11,603 15 0	27,940 15 0	32,823 G					
3	Drog .		356	0	0	6,162	4 0	11,293	0 0	11,198 11 0	22,491 11 0	28,653 15					
4	Bhilaí .		315	8	0	5,954	8 0 141	15,900	10 0	11,000 15 0	26,901 9 0	32,856 1					
5	Patan .		145	11	0		8 0	15,403	10	10,760 18 0	26,163 14 0	38,147 1					
6	Ranchirai .		363	11	0	6,712	0 0	14,796	70	7,207 15 0	22,004 8 0	28,716 6					
7	Arjanda .		28	6	0	7,409	2 0	14,807	70	11,796 9 0	26,604 0 0	34,013 2					
8	Pinkspar		145	1	0	4,832	60	8,218	80	9,528 3 0	17,746 11 0	22,57 9 1					
9	Bhandera		5 60	11	0	7,489	2 0	9,604	13 0	13,724 6 0	23,329 8 0	80,818 5					
	'fotal .		2,278	12	0	55,165	7 0	1,23,346	7 0	1,04,878 8 0	2,28,224 15 0	2,83,890 6					

STATEMENT VI.-Details of Malik-makbuzas' and Tenants' Payments.-(Concld.)

23

Serial No.	1	Name of	Assessment Grou	p.		Recorded at for- mer sottlement.	Recorded in of re-sett)	the eme	year ut.	Amount as as avera		ned	Sanctione the Chief mission	d t Con .er,) y 4-
								R	JG '	FAĦSIL.					
						Rs.	Re.	8.	p.	Re.	8.	p.	Ro.	b ,	P
1	Dhamda ,.	•			•••	50	420	0	0	430	0	0	420	0	C
3	Nankatti				•••	140	251	0	0	128	0	0	128	0	(
8	Drog				•••	485	493	12	0	472	12	0	478	13	0
4	Bhilai					120	415	0	0	870	0	0	370	0	6
5	Patan		***			227	192	0	0	192	0	0	192	0	0
6	Ranchirai				1	30	142	18	0	132	12	0	132	12	0
7	Arjunda	,			•••	159	330	0	0	277	0	Q	277	0	Ø
8	Pinkapar					501	496	4	0	494	4	0	. 499	4	0
9	Bhandera					िस्टि सयमेव ज	120	0	0	120	0	0	120	0	0
				Total .		1,712	2,858	12	0	2,606	12	0	2,611	12	-
							DH	AM	TA]	RI TAHSI	L.		#		****
1	Sanjari					557 0 0	2,735			1,781		•	1,655	• • •	

STATEMENT VII.—Siwai Income.

Tenants.
ed ed
Privil
by P ₁
h eld
land
and
<u>K</u> hudkasht
Ner,
r 111 r amation of
* ****

		818	SIR AND KHUDKASHT.	(ASHT,	AREA HELD BY PRI VILEGED TENANFS	ELD BY PRI- ED TENANTS.		BENTAL V ADOI	BENTAL VALUATION ADOFTED.	RENTAL VALUAT SANCTIONED.	BENTAL VALUATION SANCTIONED.	VALUATION ANNOUNCED.
Serial No.	Name of Assessment Group.		Аваа цвавяр обт.	ARBA CULTI- VATED BY MAIGUZARS.		Compare rent	Total reutal value (Columus 3, 5 & 6).	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	For area held by	ם ש ע ע ע ע	by	Forsir, khudkasht and land leid by
		Rental value at sanctioned rent-rates.	Compare rente actually paid to malguzars.	Rents value at sanctioned rent-rates.	at sanctioned rent-rates.	actually paid to malguzars.		khudkseht.	privileged tenants.	khudkasht.	privileged tenants.	privileged tenants together.
	61	m	4	ъ	υ	6		6	0	11	12	13
						DRUG	TAHSIL.					
		Rs. a. p.	Rs. a. p.	Rs. n. p.	Be. a. p.	Here	Rs. a. p.	Rs. a. p.	Rs. n . p.	R. a. p.	Re. a. p.	Ra. a. p.
-	Dhanda	1,057 5 0	1,009 14 0	10,944 1 0	0 01 649		21,651 0 0	19,879 2 0	636 15 0	19,757 8 0	636 15 0	20,883 0 0
<i>c1</i>	Naukatti	388 0 0	455 8 0	16,297 13 0	711 0 0		17,395 13 0	16,053 7 0	666 15 0	16,536 6 . 0	666 15 0	17,277 8 0
e 2	Drug	745 8 0	1,398 9 8	14,796 6 0	432 6 0	3	15,964 4 0	15,663 13 0	409 0 0	15,663 13 0	409 0 0	16,337 6 0
4	Bbilsi .	640 15 0	1,093 11 0	14,843 10 0	645 0 0	1990-1990 (1997) 	16,129 9 0	15,412 13 0	627 6 0	15,423 13 0	627 5 0	16,028 11 0
LQ	Patan	475 5 0	375 13 0	9,327 5 0	682 11 0		10,385 6 0	9,500 3 0	569 12 0	9,386 1 0	669 12 0	10,363 0 0
9 9	Ranchirai	330 4 0	481 7 0	10,616 16 0	8 90 2 0	:	91,2 87 5 0	10,296 8 0	965 10 0	10,296 8 0	865 10 0	0 3 485'11
5	Arjunda.	891 13 0	1,503 0 10	11,822 13 0	554 14 0	:	13,269 7 0	12,539 0 0	469 4 0	12,661 0 0	469 4 0	13,145 10 0
Ø	Pin ka par	1,008 4 0	1,137 15 6	8,672 3 0	382 2 0	4 * *	10,062 9 0	9,589 13 0	37 3 4 0	9,689 13 0	373 4 0	9,787 4 0
G	Bhandera	881 2 0	559 9 0	11,959 2 0	441 4 0	ŧ	12,811 8 0	12,287 4 0	430 14 0	12,428 10 0	430 14 0	12,761 2 0
	Total .	5,918 9 0	8,030 7 0	1,18,210 3 0	4,779 1 0	:	1,28,907 13 0	1,21,821 15 0	4,648 15 0	1,21.743 7 0	4,543 15 0	1,28,021 3 0
					â	DHAMTARI TAHSIL	TARSIL.				•	
7	Sanjari	100 1 8	54 54 6	:	;	ł	:	1,856 11 10	139 9 4	1,856 11 10	139 9 4	1,996 10 6

 $\mathbf{25}$

									T ZT BY RETAR	AT SETTLEMENT.	
ertal No.	Name of Aascssmeut Group.	Details of figures.	Payments of malik-wak- buzas.		Annual ralue of sir, khundkasht and fand held by priviteged tenants.	Siwal receipte.	Total.	Cash rèntul.	Estimateed value of sir, bindkasht and land held by privileged tenanto.	Simai reculpts,	Totsi.
1	2		5	5	0	7	8	IJ	10	11	12
					DRUG	TAHSIL					
			Ra. m. p.	Rs. n. p.	Rs. a. p.	Re. a. p.	Rs. a. p.	Be. A. P.	Re. a p.	Ro. B. S.	Rs. a, p.
		an proposed .	213 0 0	34,210 1 0	20,616 1 0	4 20 0 0	66,359 2 0	h			
1	Dhamda {	e sanctioned	213 0 0	51,105 9 0	20,804 7 0	\$20 D N	85,139 0 0	\$0,96 15 6	11,369 1 3	50 0 0	43,326 0 8
		As announded.	213 4 0	33,592 11 0	20,893 9 0	420 0 0	85,098 8 0	ļ			
		As proposed	106 7 0	33,290 11 0	17,320 6 0	128 0 (40,845 8 ('n			
1	Nanksiti	As sanctioned	105 7 0	33,197 8	17,203 4 0	128 0 (50,634 14 (32,600 14	12,233 0 3	140 0 0	43,973 14 6
		As sanounced .	108 6 0	32,677 6 0	17,277 8 0	128 0	δ0,089 3 Ι	٥Ĥ			
		Le proposed .	. 176 8 0	29,661 3	0 16,072 13 0	472 13	46,263 3	'n			
:	Drag	As souctioned .	275 8 0	29,404 10	0 10,073 13 0	472 13	46,225 11	27,203 1	8 10,861 1 5	6 85 0 0	38,548 3 1
		As announced .	279 4 1	29,047 8	0 16,337 6 (673 13	40,136 13	0			
		As proposed	203 8	34,135 6	0 16,040 1	0 370 O	0 50,748 10	0			
	é Bhilei	As anotioned	188 10	0 34,135 0	0 16,051 2	870 0	0 0,745 3	0 } 30,780 \$	4 10,603 13 10	120 0 0	41,478 0 1
		As announced	187 4	0 34,143 10	0 16,028 11	0 370 0	0 50,729 P	0			
		As proposed	91 14	0 29,649 15	0 10,069 15	0 193 0	0 \$9,803 13	٥h			
	5 Patan	As ranotioned	91 14	0 29,390 3	0 9,955 13	0 192 0	0 39,635 1 4	0 } 23,380 16	9 6,489 1 0	227 0 0	\$0,091 0 9
		UAR aunounced	97 10	0 28,819 13	0 10,363 0	0 193 0	0 39,472 7	0			
		As proposed		0 24,505 3	0 10,862 2	0 133 12	0 35,541 12	1			
	6 Ranchirai .		341 12	0 24,374 14	0 10,663 2	0 139 12	0 35,411 8	0 21,910 14	3 6,915 6	30 0 0	37,003 4 3
		LAs announced	241 12	0 23,651 10	0 11,437 2	0 133 12		1			
		As proposed		0 32,896 14	0 15,008 4	0 277 0		11		189 0 0	38,895 10 8
	7 Arjands	As sanctioned			0 13,130 4	6 277 0	1		7 9,491 9		.0,000 14 U
		UAs annonneed		0 32,900 4							
	8 Dishanan	As proposed	}	0 22,920 12				11	2 6,840 15	8 501 0 0	19,005 14 1 1
	8 Pinkspar	Аз явлотіоро		0 22,805 12							
	•	As announced						}			
	8 Bhandera	As proposed		0 31,064 12		ĺ		0 30,596 8	8 6,318 0		36,913 8 1
	0	As annozneed			0 12,859 8		0 44,505 0	11			
		As proposed		0 31,156 4 0 2,70,914 11	0 12,761 2 0 1,26,370 14		0 4,01,639 10				
	Total	as canotioned	1 1,724 13	0 2,70,638 11	0 1,26,292 6	0 2,611 12	0 4,01,055 10	0 2,47,357	3 11 79,819 0	11 1,713 0	83,888 9
		As announce	1 1,732 3	0 2,69,871 8	0 1,28,031 3	0 3,611 13	0 4,01,238 2	0			[
					DHAM	TARI TAP	181 <u>1</u> .				
		As proposed	50	4 7,045 0	0 1,996 5	3 1,781 13	0 10,828 1	•			
	1 Canjari	As mantioned	1 50	4 7,045 0	0 1,998 5	2 1,665 12	0 10,703 1	6 7,811	10 1,960 7	17 697 6 0	9,668 10
		AFADDounce	1 60	4 7,067 0	0 1,996 10	6 1,665 12	0 10,714 6	10			1

STATEMENT IX.-Total estimated enhanced assets compared with assets of former Settlement.

:							.KA	ALYSIS OF INCO	MR ON WRICE	L TRENSBEST 1	LIBRD.
erial No.	Name of Assess- ment Group.	Details of Agures.	Present revenno.	Proposed, sauctioned and announced rovenue.	of present revenue	Percentage of revised revenue on total rovised assets.	1	Sewai rocoipia.	Valuation of sir and khudkasht.	Valuation of iand held by privileged tonants.	Reut enhance- ment.
1	3	3	<u>ś</u>	5	6	7	8	9	10	11	12
					DRUG	TAHSIL.					
			Rs. a. p.	Rs. a. p.	l.		Rs, 5, ,	Ra. n. p.	Rя, в. р.	Rs. a. p.	Rs. a. j
	1	As proposed	31,147 6 7	27,495 0 0	50	50	91,781 10 0	62 0 0 0	18,8 60 4 0	\$3 5 15 0	+ 3,651 5
1	Dhamda	As sanctioned		27,665 0 0		50	31,781 10 0	420 0 0	18,747 10 0	636 15 0	+ 8,549 13
•	{	As announced		27,675 0 0		50	3 1,781 10 D	420 0 0	19,873	11 0	+ 3,023 3
	(As proposed	\$1,414 B 3	24,540 0 0	40	49	30,367 11 4	128 0 0	18,187 15 0	666 15 0	+ 2,494 14
3	Nankatti	As canctioned		34,280 0 0		49	30,367 11 💧	128 0 0	16,070 13 0	666 15 0	+ 9,401 6
		As asnounced	4×4	24,375 0 0		49	50,367 11 4	129 0 0	16,612	0 0	+ 2,781 6
	(As proposed	20,220 19 7	23,610 0 0	52	3 61	29,017 2 0	472 12 0	14,265 3 4	409 0 0	÷ 2,098 1
3	Drag	As sanctioned	*13	13 ,570 0 0	6236	51	29,017 3 0	473 12 0	14,285 9 4	403 0 0	+ 2,001 9
		As anno unosd		28,550 0 0		81	29,017 2 0	473 13 0	14,939	11 4	+ 1,708 3
	1	As proposed	1 20,537 0 2	24,940 0 0	66	48	32,825 3 4	370 0 0	14,314 2 0	627 5 0	+ 2,611 15
1	Bhilai	As sanctioned		16,190 0 0		68	\$2,825 3 4	3 70 0 0	14,825 2 0	627 5 0	+ 2,697 7
	ļ	As announced	744	26,190 0 0		48	32,825 3 4	370 0 0	14,930	0 0	+ 2,604 5
2	(As proposed	14,964 0 0	20,302 0 0	80	51	25,524 7 2	192 0 0	9,124 7 0	569 13 0	+ 4,393 1
8	Patan	As sanctioned		20,225 0 0	सन्यमे	51	25,524 7 2	192 0 0	9,010 5 0	569 12 0	+ 4,339 5
		As announced		20,155 0 0		51	25,824 J 2	192 0 0	9,967	4 0	+ 3,768 11
•		As proposed	14,020 0 0	17,875 0 0	51	50	22,681 11 6	192 12 0	9,815 1 0	365 10 0	+ 2,548 9
46	Ranchirai	As sanctioned		17,670 0 0		50	22,691 11 6	152 19 0	9,815 1 0	365 10 0	+ 2,416 5
		Ås announced		17,670 0 0		50	22,691 11 0	133 13 0	10,958	5 11 0	+ 1,693 1
		ås proposed	31,619 6 0	24,925 0 0	56	54	31,441 5 1	277 0 0	11,095 15 2	489 4 0	+ 2,892 1
7	Arjunda	As sanctioned		24,615 0 0		59	31,441 # 1	277 0 0	11,157 18 2	<u> 469 4 0</u>	+ 3,957 9
		As announced		24,615 0 0		58	31,441 5 1	277 0 0	11,643	92	+ 2,095 7
		As proposed	16,374 0 0	18,264 0 0	56	68	22,198 6 6	494 4 0	8,451 18 6	373 4 0	+ 1,960 5
18	Pinkapar	As sanctioned		18,148 0 0		54	32,188 0 6	499 4 0	9,451 13 6	373 4 0	+ 1,941 5
		As announced		19,118 0 0		61	23,198 6 6	499 4 0	B,646	4 8	+ 2,037 15
		As proposed	22,108 0 0	25,025 0 0	60	60	29,439 9 2	120 0 0	11,727 11 0	430 14 0	+ 2,660 13
5	Bhandera	As canctioned		24,770 0 0		66	29,439 9 2	120 0 0	11,869 1 0	430 14 0	+ 1,652 13
	i i	As announced		24,770 0 0		68	29,430 9 2		12,20		+ 2,744 5
		As proposed	1,72,313 1 7	1	59	61	2,55,277 2 1		1,13,791 6 0		+ 25,415 4
		As sanctioned		3,05,103 0 0		51	2,65,277 2 1		1,13,718 0 0	/ <u></u>	+ 24,914 12
	1 1	As announced		2,05,118 0 0			2,58,277 3 1	2,611 13 0	1,19,99	0 12 0	+ 29,356 13
					1	ARI TA	Ī				
		As proposed	5,173 12 0	6, 9 75 0 0	53	49	7,666 5 6		1,8(2 3 10	1	
	1	As sanctioned	-	5,195 0 0		40	7,666 5 4		1,802 3 10	, <u> </u>	
	(As announced		5,195 O O		49	7,686 5 4	1,665 12 0	1,94	2 2 6	

STATEMENT X.-Revised revenue and analysis of assets.

					Сонът	BR INCREADE IN				68 3X. 63 3X	INOIDBRC IN CULT	N PER ACRE TVATION OF
Smiai No.	Name of Assess- ment Group.	Detsils of figures.	Increase in revenue.	Cash rental.	In valuation of sir, khad- kasht and privileged land.	Siwai income.	Net increase or decrease.	Increase or decrease per cent. of revenue.		Estj- msted income.	Present revenue on area of former settlement.	Proposed, sanotione, and aunour oed revenne on present area.
1	1	3	4	5	6	7	8	9	10	11	12	13
			_		•		TANBIL.					
			Re. n. p.	Rs. a. p.	Вн, в. р.	Es. s. p.	Rs. a. p.				Re. s. p.	0 6 7
		As proposed	+ 6,847 9 5	+ 3,516 1 6	+ 9,146 15 10		+ 13,033 1 6	+ 30	+ 19	+ 31	0 4 10	
1	Dhamda {	As sanctioned	+ 6,637 9 5	+ 3,411 9 6	+ 9,025 5 10	+ 370 0 0	+ 12,806 15 4	+ 31		+ 30	•••	055
	ί Ι	As announced	+ 6,527 9 5	+ 2,587 15 6	+ 9,814 7 10	+ 370 0 0	+ 12,773 7 4	+ 91		+ 30		058
	(As proposed	+ 3,035 7 9	- 302 12 3	+ 8,087 5 9	- 1300	+ 5,872 9 6	+ 14	+ 8	+ 13	0 4 10	0 5 1
3	Nankatti {	As sanctioned	+ 3,815 7 0	- 296 4 3	+ 5,970 3 9	- 12 0 0	+ 5,661 15 8	+ 13		+ 13		0 5 0
	1 1	As annonneed	+ 2,960 7 9	— 9311 9	+ 6,044 7 9	- 1300	+ 6,116 3 6	+ 14		+ 14		0 5 0
)	As proposed	+ 3,369 3 8	+ 2,518 B 4	+ 5,211 11 7	- 12 4 0	+ 7,713 15 11	+ 16	+ 6	+ 20	081	059
3	Drog	As sanctioned	+ 3,349 3 8	+ 3,478 0 4	+ 6,211 11 7	- 12 4 0	+ 7,677 7 11	+ 16		+ 20		069
	l l	As announced	+ 9,828 3 5	+ 2,134 10 4	+ 5,478 3 7	- 12 4 0	+ 7,588 9 11	+ 18		+ 20	•••	059
	l (As proposed	+ 3,913 15 10	+ 3,888 5 8	+ 5,436 4 2	+ 250 0 0	+ 9,274 9 10	+ 19	+ 11	+ 22	0 4 7	0 4 11
4	Bhilat	As sanctioned	+ 3,662 15 10	+ 3,673 13 8	+ 5,447 4 2	+ 260 0 0	+ 9,271 1 10	+ 18		+ 23		0 4 10
	{	As announced	+ 3,603 15 10	+ 3,850 11 8	+ 5,424 13 2	+ 150 0 0	+ 9 255 A 10	+ 29		+ 23		0 4 10
		As proposed	+ 5,318 0 0	+ 6,160 13 3	+ 3,688 14 0	- 35 0 0	+ 0,712 11 3	+ 35	+ 14	+ 33	0 5 11	0 4 1
6	Patan	As sanctioned	+ 5,341 0 0	+ 6,107 1 3	+ 3,473 13 0	- 35 0 0	+ 9,544 13 3	+ 35	1.1	+ 33		070
•] _]	As announced	+ 8,171 0 0	+ 5,536 7 3	+ 3,879 18 0	- 35 0 0	4 9,381 6 3	+ 38		+ 31	.4.	0 7 0
		As proposed	+ 3,855 0 0	+ 3,429 15 10	1. 109	+ 103 13 0	+ 7,979 7 9	+ 27	+ 12	+ 28	057	0 8 6
			+ 3,050 0 0	+ 3,290 11 10	+ 4,346 11 11	+ 103 13 0	+ 7,749 3 9	+ 26		+ 28		0 6 4
6]]	As sauctioned			71-4-14	416171				-	•••	0 6 4
		As announced	+ 3,650 0 0	+ 3,576 7 10	+ 5,121 11 11	+ 103 19 0	+ 7,800 15 9	+ 28		+ 28		056
		As proposed	+ 3,305 10 0		+ 3,510 10 11		+ 7,819 15 4	+ 16	+ 10	+ 20	051	
7	Arjunda	As sanctioned	+ 3,995 10 0	+ 6 ,150 13 B	+ 3,628 10 11	+ 118 0 0	+ 7,907 7 4	+ 13		+ 20	•···	, 0 8 3
	ļl	As announced	+ 3,995 10 0	+ 4,189 10 5	+ 3,654 0 11	+ 118 0 0	+ 7,960 11 4	+ 14		+ 21		0 5 3
	ſ	As proposed	+ 1,990 0 0	+ 1,187 13 10	+ 9,317 1 3	- 6130	+ 4,478 3 1	+ 13	+ 5	+ 15	057	060
8	Pinkapar	As sanctioned	+ 1,874 0 0	+ 3,142 13 10	+ 3,317 1 3	- 1130	+ 4,458 3 1	+ 12		+ 15		0 8 10
		As announced	+ 1,844 0 0	+ 1,239 6 10	+ 9,141 4 3	- 1110	+ 4,378 15 1	+ 11		+ 15		0 5 11
	(As proposed	+ 2,919 0 0	+ 914 B B	+ 6,403 1 8	+ 120 0 0	+ 7,466 7 3	+ 13	+ 6	+ 20	0 8 6	0 5 11
9	Bhandera	As sanctioned	+ 3,666 0 0	+ 980 8 6	+ 6,643 7 8	+ 1 30 0 0	+ 7,599 13 3	+ 12		+ 20		0 5 11
		As announced	+ 1,604 0 0	+ 1,017 13 6	+ 6.445 1 8	+ 130 0 0	+ 7,893 15 3	+ 13		+ 21		0 5 11
						+ 594 13 0	+ 73,251 0 2	+ \$0	+ 9	+ 23	0 5 3	0 8 8
		As proposed	+ 33,962 14 5		+ 47,051 18 1							0 6 7
	Total (As sanctioned			+ 46,973 \$ 1		+ 72,877 0 3	+ 19		+ 13		
		As annonnesd	+ 33,804 14 6	+ 33,345 18 1	+ 68,703 1 1		+ 72,047 18 2	+ 19	}	+ 23		0° 8, 9,
						dhamtabi 						
	ſ	As proposed	+ 103 4 0	-7e1 3 G	+ 735 18 3	+ 1,186 19 0	+ 1,169 6 B	+ 3	+ 9	+ 13	0 \$ 10	
1	Sapjari	As sanctioned	+ 11 4 0	-761 2 6	+ 785 13 3	+ 1,088 19 0	+ 3,033 6 9	Na.		+ 11		038
	l	As announced	+ 23 4 0	-749 2 6	+ 738 3 7	+ 1,058 13 0	+ 1,045 13 1	Nil.		+ 11		0 3 8

STATEMENT X1.-Increase in revenue assets and cullivation and incidence of revenue.

oria) No.	Name of Assessment Group.	Details of the figures.	Revised pay- ment on malik-mak- buza land,	Amount of revised pay- ments taken as revenue payable to Government.	Amount of revised pay- ment relin- quished to malguzar as drawback.	Percentage of drawback on revised payments.	Balance (f revised revenue chargeable to malgutari land.	Percentage of such baisnes on mal- guzari assets.
1	3	8	6	5	6	7	8	
			DRUG	TAHSIL.				
			Rs. s. p	, Bs. a , p.	Rs. 8. p		Ba, n. p.	
		(As proposed	213 0 0	185 6 0	26 10 0	- 13	27,308 10 0	50
1	Dhamda .	As sanctioned	113 0 0	186 6 0	26 10 0	19	27,498 10 0	50
		As sphonneed	213 4 0	185 10 0	26 10 0	18	27,489 6 0	50
		(As proposed	106 7 0	90 6 0	16 1 0	15	24,349 10 0	
.1	Nanketti .	As sanctioned	106 7 0	90 6 0	16 1 0	15	24,139 10 0	- 49
		As appounced	106 6 0	90 6 0	16 0 0	15	24,284 10 0	
		As proposed	175 6 0	234 3 0	41 5 0	15	23,875 18 0	5 1
	Drog	As sanctioned	275 8 0	234 3 0	41 6 0	15	29,335 18	51
		As announced	279 4 0	387 8 0	41 13 (15	23,312 8 (51
		(As proposed	208 8 (187 10 0	35 8 (17	34,173 6 (48
4	Bhilai	As esactioned	188 10 (167 10 0	21 0 0	n n	24,012 8	5 47
		As annonneed	187 4 (166 12 0	20 8	n n	24,023 4	0 4 8
		(As proposed	91 14 (78 10 0	13 6	0 16	20,223 6	0 61
5	Patan	As sanctioned	91 14	0 78 10 0	13 4	14	20,146 6	0 51
		besauoana aA	97 10	0 86 16 0	15 12	14	20,070 8	0 \$1
		(As proposed		0 204 14 0	36 14	0 15	17,670 B	0 50
	Ranchirai	As manetioned	241 12	0 204 14 0	86 14	0 15	17,465 2	0 50
		As announced	841 12	0 204 14 0	36 14	0 15	17,465 3	0 8
		(As proposed	38 6	0 27 14 0	5 10	0 17	24,897 2	0 5
2	Arjunda	As sauctioned	33 8	0 27 14 0	5 10	0 17	21,587 2	0 5
		As announced	38 8	0 27 14 0	5 10	0 17	24,587 3	0 5
		(As proposed	106 0	0 88 12 (17 4	0 16	18,175 4	0 5
1	B Pinkapar	As manchioned	106 0	0 88 12 0	17 4	0 10	18,059 4	0 5
		LAs announced	106 0	0 88 12 0	17 4	0 16	18,020 4	0 5
		(As proposed	476 2	0 384 12	91 6	0 1	21,640 4	0 5
4	Bhandern	As sanctioned	468 3	0 384 12	83 6	0 1	3 21,385 4	0 5
		As announced	468 2	0 381 12	0 83 0	0 1	8 21,385 4	0 5
							B 2.04,812 9	0 0
	ſ	As proposed		0 1,463 7				1
	- Total	As sanctioned	1	0 1,463 7				1
	l	As announced	1	0 1,471 6 } TARI TAH	1		• •, ~, · · · · · · ·	
		(de proposed			1	4 1	6 5,270 13	0 4
	• Restart	As propused	50			1	5,190 13	0 4
	1 Senjari	As announced	. 50			1	6 5,190 13	0

STATEMENT X11Distribution of revised revenue between Malik-makbuza and Malguzari Lands.

			P	B10B T) 8871(non.				AB B	EVISED			Actual increase of	
Serial No.	Name of Assessment Group.	Kamil	jama.	rea) owi	ia not izable ng to issiou.	Net re realiza		Kamil- as sanct by the Commiss	ioned Chief	rcal owi	a not izable ng to ssion.	Net re realiz		revised net resizable jama over previous jama.	ln- crosse par cent.
	2	3			4	5		6			7		3	9	10
						D	RUG	 TAHSII	4.						
		Rs.	n, p.	Rs.	a. p	. Rs. a	.p	₿4. ¤.	, p.	Ba.	8. p	. Bı,	s. p.	Rs. a. p.	
3	Dhamda .	21,147	67	25	0 0	21,122	87	27,075	0 0	37	80	27,637	8 Q	6,515 1 1	31
8	Naukatti .	. 21,414	88	1,566	8 Q	19,860	08	24,376	00	1,615	0 0	22,760	0 0	2,909 16 1	15
3	Drag .	20,220	12 7	320	0 0	19,900	12 7	23,550	0 0	475	00	23 ,075	0 0	3,174 3 6	16
•	Bhilai .	2 0,527	02			20,527	0 2	24,190	0 0			24,190	0 0	\$,€6 <u>8</u> 15 10	18
5	Patan .		00	396	0 0		0 0	20,155	D O	530	0 0	19,625	00	5,027 0 (34
6	Banebirai .	. 14,020	0 0			14,020	0 0	17,670	0 0			17,670	0 0	3,650 Q Q	36
7	Arjande	21,619	60		,	21,619	60	24,615	0 0			24,615	0 0	2,995 10 O	14
8	Pinksper	16,27 \$	0 0	2,095	0 0	14,179	0 0	18,118	0 0	2,250	0 0	15,868	0 0	1,689 0 0	13
9	Bbandera	22,106	0 0			22,106	0 0	24,770	00		•••	24,770	0 0	2,684 O Q	12-
	Total	1,72,313	1 7	4,390	8 0	1,67,928	97	3,05,115	0 0	4,907	8 0	2,00,210	8 0	32,2 87 36 G	

.

STATEMENT XIII.—Showing the net revenue increment.	for regularly settled areas in the District.
--	--

APPENDIX No. A.

RULES FOR PATWARIS ON MAP AMENDMENT WORK.

1. Patwaris on map correction work must have the following instruments, all of which should be in good working order, and chain correct :---

1 plane table and tripod.	1 divider.
1 chain with 5 arrows.	1 wooden scale (16 inches=1 mile).
3 flags.	1 offset scale.
1 cross-staff.	l acre-comb.
1 offset staff (20 links).	 offset scale. acre-comb. tin case for map.
•	

The following stationery and forms will also be furnished :--

1 hard pencil.	3 medium pointed nibs.
1 soft pencil.	1 pen-holder.
	1

1 small bottle-blue black ink.

Charsala khasra forms for whole circle.

Parcha kisan for whole circle.

Fard partals for whole circle.

Fard chakwar for whole circle.

Fard mukabla arazi khet for whole circle.

Traces in cobalt blue (field numbers omitted) of all villages in circle.

2. The order in which villages will be taken in hand in each circle will be arranged by Inspectors, care being taken that they are contiguous for convenience of supervision.

3. Patwaris will reside in the village under map-correction and work at hours appointed by the Officer-in-charge.

4. Arrangements must be made by Inspectors with the mukaddams of village to divide the tenants into squads of two or three for the daily help of the patwari in his duties of mapcorrection.

5. Before beginning the map-correction of a village all corrections and additions shown on old traces that can be relied on as accurate should be transferred in pencil to the new traces and will be treated for map-correction purposes in precisely the same manner as the portions traced in blue.

6. The Patwari will begin his map-correction from field No. 1 in trace and go serially through the village recording each day in his diary-

- (1) The area compared.
- (2) The number of fields completed stating from No. to No.
- (3) The number of men helping.

7 It is not necessary that wholesale re-measurements be effected. Patwaris should compare field boundaries on traces with field boundaries on ground, and if a careful eye comparison shows no appreciable discrepancy, the survey may be accepted as correct. Differences of 10 or 15 links need not be corrected. All fields in which there has been little or no change should first be inspected and subsequently such portions of a village in which there have been numerous and complex changes or large extensions of new cultivation; field boundaries on trace but not on ground should be cut out in pencil and boundaries on ground but not in trace should be correctly measured and entered in pencil.

8. Where there have been numerous and complex changes the area affected should be ring-fonced in pencil on the trace and be surveyed on a separate sheet of paper. This survey when passed by Inspector can then be traced into its proper position on map; new cultivation when of large extent (exceeding 20 acres) should be similarly dealt with.

9. When fields are small, that is, from 0.10 to 0.20 of an acre, and there has not been much change, at least 300 numbers should be disposed of daily.

10. Where there have been numerous changes and new areas to survey, the area actually surveyed and number of fields should be shown in diary, and an area of at least 20 acres a day should be completed under such circumstances.

11. Roads will be shown by two lines only on map, whether railway or ordinary roads. Survey stations omitted from traces should be entered at time of map-correction, and if shown in wrong position in map or on ground should be located correctly on traces at the same time.

12. All new surveys should, when possible, be based on survey stations and lines. When survey stations are in their wrong position on ground they should be destroyed and re-erected in their correct positions.

13. When a malguzar or tenant has amalgamated land held in different rights, the dividing line of such rights must be ascertained and be shown on map by broken lines thus......

14. In cases where fields are so small as not to permit of numbers being legibly entered, they should be shown on an enlarged scale in any blank portion of trace.

15. Patwaris are prohibited from making any alteration in village boundaries. Boundaries having been passed at last settlement must be accepted as final and no alteration must be attempted without the sanction of the Officer-in-charge. Where cultivation has extended beyond the boundary of a village, the portion beyond the boundary must be shown in the adjoining village.

16. Patwaris must run at least one partal line through the work completed each day and enter result in the village fard partal. These partals will from time to time be tested by the Inspectors.

17. The fard partal is in the following form :	17.	The fard partal is in the following form :
--	-----	--

Date.	Length of chain line.	Number of field cuttings.	Number of errors.	Signature of officer making partal.
8	2	3	4	5

18. Column No. 1 will show date of partal,

Column No. 2 the length of partal line,

Column No. 3 the number of field boundaries on line,

Column No. 4 number of field boundaries found wrong (errors under 10 links need not be shown),

Column No. 5 signature of patwari.

19. No ink must be used on traces until patwaris receive permission from Inspectors to ink up their work. All corrections or new surveys must in the first instance be in pencil. Traces must not be folded but should be rolled on bamboos. They keep much better in this manner.

Khasra,

20. On the completion of map-correction and the transfer to the trace of new surveys, the writing of the khasra will be taken in hand, and in order to preserve the old numbers as far as practicable patwaris will with the aid of the previous year's jumabandi ring-fence on old trace by thick pencil all field numbers adjoining one another held in the same right and by the same tenant thus forming chaks.

21. A report should then be submitted to the Inspector in the following form showing the saving in khasta entries likely to be effected by the formation of chaks, allowing each chak as a tentative measure only one number :---

Patwari circle.	Number of last settle- ment khasra.	Number of chaks formed.	Number of chases entries in chaks.	Percentage of entries saved.	Number of fields amolga- wated.	Percentage of saving caused by amalgama- tion.	Percent- age on whole.	Inspec- tor's order.
1	2	• 3	4	5	6	7	8	9

Khasra Chak Report.

22. The report should show-

- (a) Total number of khasra entries.
- (b) Number of entries saved by amalgamation of fields.
- (c) Number of entries saved by making chake.

It should further state approximately the number of new fields, that is fields newly broken up that are likely to be met with in the map-correction of the village.

Columns 5, 8 and 9 will be left blank by patwari and will be dealt with by Inspector.

23. Having submitted this report the patwari will not wait for orders, unless the Inspector is able to pass them immediately, but will take, up the map-correction of a new village.

24. In the event of the Inspectors ordering old numbers to be retained, the patwarz will number the fields in precisely the same manner as at last settlement. Where fields have been partitioned he will show the partitions in fractions of the original number thus $\frac{50}{2}$, $\frac{50}{2}$, $\frac{50}{2}$.

25. Where fields have been amalgamated he will show the dividing line by dots and maintain the old numbers.

26. In the case of new cultivation he will show in the khasra the original field number as a guide and adjoining it the number of field being the next following the last number in the village thus; last number in the village 500; the first new field will be shown as 501, the locating number being entered along side thus 250-501. In the trace only 501 must be entered.

In cases where fields have been inadvertently left unnumbered, the same procedure will be carried out except that in this case the guiding number will be a number adjoining the omitted field.

27. When villages have been ordered to be re-numbered the numbering should begin in the north-west and end in the south-east corner of trace.

28. Whenever a large block of fields is separated from another block by a road or stream or large plot of jungle or waste, the numbering should be carried consecutively through such block, then enter the stream or road and be continued in the next block, each number being as close as practicable to the number preceding it, thus :--

(Diagram omitted.)

सत्यमेव जयत

This prevents the stream from being frequently crossed and re-crossed. When for convenience of maintaining consecutive numbering it is necessary to divide a plot of waste, stream or road, &c., into two or more portions, the limits of such portions must be distinctly marked so as to avoid confusion in calculation of areas.

29. Numbers should be entered in pencil on map only ten at a time, and, on the completion of the khasra of these, another ten should be entered.

30. Field numbers, chak boundaries and corrections will be subsequently inked upon Inspectors satisfying themselves that patwaris can ink neatly. The inking should be firm and field numbers should be written small and neatly, facing the north of sheet and run parallel with north and south edges; where fields are too narrow to admit of this, numbers may be entered lengthwise.

31. Branches of streams and roads must bear separate numbers from the main stream or road.

32. Sugarcane land held by the village jointly should bear only one number, the column of remarks showing the share held by each tenant.

33. Villages which have been partitioned and the mahals demarcated must be re-numbered and the numbering should be carried consecutively through one mahal before entering the second; for instance if the last number of the first mahal be 502, the first number in the second mahal should be 503 and should immediately adjoin 502 on trace. In the khasra 503 should not be shown on the same page as 502, but in the third line of the following page.

34. All rice fields adjoining one another, held by the same tenant and in the same right and soil, approximate each other in value, should be ring-fenced by a thick pencil line on trace and form a chak.

35. Chaks will bear only one number and should not in the lighter soils be more than 10 acres in area and in black soils more than 5 acres, and should be of a regular shape, all portions of the chak being within easy view of khasra writer for purposes of distributing crop areas.

36. Tenants will be furnished with parchas in the following form and as a patwari enters a field number on his trace and in his khasra, he will enter it at the same time in the parcha of the tenant to whom it belongs. These parchas should be compared each evening with entries in the khasra and any differences found be noted for correction next day :---

Parcha Kisan.

Name of tenant-------. Father's name------. Caste-----.

Holding No.	Origin of holding.	Number of fields.	Number of years held.	Right in which hold.	Bent.	Field numbers.
1	2	3	4	δ	6	7

Column 1 will show the number of holding according as it may be an absolute-occupancy, occupancy, ordinary or service holding.

Column 2 will explain the origin of holding; if of last settlement, the entry will be "bandobast se;" if from sir "Sir se;" if by purchase "kharid se;" &c.

Column 3 will show the total number of fields in holding.

Column 4 will show the number of years in occupation (only in case of fields occupied subsequent to settlement).

Column 5 will show the right in which the fields are held.

Column 6 the rent of holding.

Column 7 will show the new numbers in holding and will be entered from left to right and not from top to bottom.

Sir and Khudkasht Parcha.

SIR	NUMB	EB.					Knup	KASHT	Numbe	15. 					
Bandobast se.	Banjar se.	Khate se.	1	2	3	4	Nu 5	umber of	Yеатв. 7	8	9	10	11	12	Bemarke.

Sir fields should be noted as having been acquired from waste or from holdings, as Banjar se or Khate se khudkasht fields should also be distinguished in the same manner. If from a holding, the letter ($\overline{\alpha}$) should be entered below number; if from Banjar ($\dot{\tau}$).

38. A parcha will also be prepared for all entries that are shown in column No. 4 of khasra in the following form :---

-Parcha-Gair Mumkin-Mauza-

Boads and buildings.	Water.	Hills.	Jungle.	Grass.	Remarks.

39. If all these parchas are carefully prepared the preparation of the jamabandi will be greatly facilitated.

40. At the same time as field numbers are entered in the parchas they will also, if forming a chak, be entered in the chak fard in the following form :--

Name of tenant.	Right in which held.	Khasra numbers.	Corresponding new numbers.
1	2	3	4

Fard Chakwar.

Column No. 1 will show the name of the tenant owning the chak.

Column No. 2 will show the right in which the chak is held, that is, sir, khudkasht, absolute-occupancy, occupancy, ordinary and service, &c., as the case may be.

Column No. 3 will show all the old numbers comprised in the chak.

Column No. 4 will show the new numbers.

41. When a number contains two or more fields the number of fields included should be stated below in words thus $\frac{45}{\text{three fields}}$ and care should be taken to check this entry with the statements of tenants.

42. The new numbers must be entered in red immediately below the corresponding old numbers in the previous year's khasra, and old numbers or parts of old numbers must be entered in red in the "Remark" column of the corresponding new number in the new khasra.

43. The final stage in map amendment is the calculation of areas. The form to be used for the calculation of areas is styled the fard mukabla arazi khet, and is in the following form. A few entries have been given to illustrate explanations which follow later on :--

		COM I		REM	ABKS.
ew field numbers.	New areas.	Old numbers.	Old areas.	+	-
1	2	3		5	;- <u></u>
1 2 8 4 6 7 	-40 -80 -80 -60 + 70 + 80 + 140 -50 -80 -70 220 -50 -90 -75	$\begin{array}{r} 32\\ 34\\ 36\\ 39\\ 40\\ + 42\\ + 44\\ + 42\\ + 44\\ + 42\\ + 43\\ + 44\\ 47\\ + 42\\ + 44\\ + 44\\ 38\\ \end{array}$	40 ·40 ·80 ·40 ·90 +70 +70 +80 1·40 ·50 ·80 ·70 ·50 ·50 ·50 ·50 ·50 ·50 ·50 ·5		 1.00
	11·75 + ·72		11.03	2·02 + ·72	1.80

All the new numbers of a village will be entered in serial order in Column No. 1.

Column No. 2 will show the new areas of field numbers entered in Column No. 1.

Column No. 3 will show the last settlement field numbers corresponding with the new numbers shown in column 1, so far as they can be identified.

Column No. 4 will show the last settlement areas of field numbers entered in column 3, and should be taken from the last settlement misl and not from the patwari's old charsala khasra.

Column No. 5 will show the difference in area between the present and last settlement field areas and should be divided into two columns—one to show (+) "beshi" when the new areas exceed old, the other (—) "kami" when the new areas are less than the old.

44. The entries in the form above will illustrate the explanations given as below :--

Where a new field shows by eye comparison that it has not altered since settlement in area, the last settlement area may be accepted as correct and the area be entered up in Column No. 2 and also in Column No. 4 as shown above in field No. 1. Where, however, an obvious error is discovered as in field No. 2 above, the new area as calculated will be shown in Column 2, the old area in Column No 4, and the difference + or - in Column 5. In this particular case the difference is + '72. Field No. 3 in Statement shows the present area to be only 30, whereas the last settlement area showed the same field as 1.30; the difference in this is shown in Column 5 as - 1.00. Field No. 4 is a chak composed of old Nos. 89, 40, 42 × 44 (where pieces of old fields are included in a new number they should be distinguished by the sign x against the old numbers. This implies that only part of the old number has been absorbed).

45. Where there have been wholesale and complete changes, and it is found impossible to identify old fields with new, the portions affected should be ring-fenced on the old trace, and the areas of all old numbers within the ring-fence should be totalled up in Column 4. The areas of the new numbers included in ring-fence will then be calculated and entered in Column 2 and a total struck. This total will then be compared with the total of old areas within the ring-fence, and if the two agree within 2 per cent., the difference may be distribated proportionately among the new arcas, thus making the new and old areas coincide. If the difference is more than 2 per cent., the new areas must be adopted and the difference be shown in Column No. 5 as plus or minus as the case may be.

On the completion of the village the areas in Columns Nos. 2 and 4 should be totalled and also + and — areas in Column No. 5, and the difference between Columns 2 and 4 should agree with the difference between the + and - columns of Column No. 5. If they do not agree, the reason should be found.

46. Before entering up areas in the new khasras an eye comparison should be made between the new areas in the fard mukabla and the field number on trace so that no gross error may be passed.

47. When the areas in fard mukabla have been completed and totalled, the fard will be made over to Inspector for testing, and on being returned passed, the patwari will enter up areas in khasra.

48. At the end of the khasra will be shown as usual the number of wells, pakka and katcha, and number of ploughs and plough-cattle in village.

सत्यमेव जयते

APPENDIX No. B.

RULES FOR INSPECTORS ON MAP AMENDMENT.

1. Inspectors on map amendment will have from 15 to 18 patwaris to supervise.

2. They will be held responsible that all patwaris are furnished with a complete set of instruments, forms, stationery and traces in cobalt blue of all villages in their circles.

3. Each Inspector will be furnished with a 66 feet measuring tape with which he must test his patwaris' chains on each occasion of his visit and correct when necessary. A copy of the rules for patwaris on map amendment will also be supplied.

4. Before allowing patwars to begin map-correction work each Inspector should collect his patwaris in a central village and show them practically how map-correction is to be done. A small village should be selected and completed in map-correction and khasra, all subsidiary forms and statements being carefully prepared and explained. Patwaris will then have no excuse to advance that they were ignorant of what was required.

5. In cases of villages whose original survey is known to be very faulty, a report should be submitted and the village should not be taken in hand for purposes of map-correction until orders are passed.

6. The work of at least two patwaris should be tested daily and where men are found inefficient, the Inspector should devote some extra time to their instruction. Inspectors must remember that their duties are to instruct as well as to scrutinise.

7. Inspectors must arrange in consultation with village mukad lams that a supply of two or three men are given the patwaris daily while on map-correction.

8. On each occasion of an Inspector's visit to a patwari's circle he should test the work completed, whether map-correction or khasra, and enter result of his testing in the fard partal. He should also occasionally test the partals recorded by patwaris. He should be careful to make an eye-comparison of trace with ground when running a partal

9. Comparison of village boundaries must also be carried out, but no alteration of boundaries must be made without the struction of the officer in charge of map amendment.

10. All new surveys must be tested and passed by Inspectors before patwaris are allowed to bring them on to their traces. Margins of sheets must also be carefully tested by Inspectors, for it is in this portion of a trace that most errors are to be found.

11. At least one partal should be run for every 200 acres.

12. Inspectors must not permit khasra work to be undertaken until patwaris furnish a report showing whether it is possible to retain old numbers or not in writing the new khasra. The form in which this report is to be propared is shown in rules for patwaris on map amendment. If the saving likely to occur be only 5 per cent, then an order for the retention of old numbers must be passed; if above this percentage or if the village consist of two or more mahals which have not separate series, the re-numbering of the village is imperativo. Patwaris inexperienced in khasra writing must on no account be allowed to undertake this work until Inspectors have fully instructed and passed them.

13 When engaged in khasra checking, parcha kisan and sir parchas and fard chakwar should also be tested.

14. In testing khasra the new numbers should when possible be compared with tenants' pattas of previous settlement.

15. At least 20 per cont. of khasra entries must be tested, and all numbers tested must be signed or initialled in ink in the remark column.

16. Before finally passing a village, the Inspectors will be held responsible that -

- (a) No field is left unnumbered.
- (b) No field is twice numbered.
- (c) No field number is repeated.
- (d) That a ten or a hundred has not been dropped in numbering.
- (e) That all boundaries have been compared.
- (f) That margins are correct.

A certificate must be entered neatly at foot of trace stating that these details have all received attention and must be signed by Inspectors.

17. When Inspectors are satisfied that patwaris are capable of inking neatly they may permit chak boundaries, corrections and field numbers to be inked up. Where a patwari is not capable of inking, the inking of his trace must be arranged for by Inspector.

18. The testing of the "fard mukabla arazi khet" is one of the most important duties of Inspectors. The compilation of this record is explained in the "Rules for patwaris on map amendment," and Inspectors will be held responsible that portions of fields falling in chaks or in new numbers are properly recorded by patwaris and no omissions passed. The accuracy of the fard mukabla is mainly dependent on these pieces being carefully dealt with.

19. On the completion of area calculation the fard mukabla will be made over to Inspector who will test 5 per cent. of all new areas and will compare all portions of old numbers divided up among new with the last settlement areas and see that they agree.

He will then put up the village with the offset area before the officer in charge for passing, and on the village being passed, he will make over the fard to patwari for completion of khases.

20. Inspectors will submit fortinghtly progress returns in the form prescribed. These returns should be prepared for periods 1st to 15th and 16th to close of month and should reach the officer in charge of map amendment by the 20th and 5th of each month.

Dates.				PA	TWARI CIRC	les.				B emarks
	1	2	3	4	5	6	7	8	9	
1	24	24			A	111				
2			28		0.410	23	D	Absent.	30	
3				30			150 K.			
4	Sick		•••		सन्द्रम	ৰ লায়ন		{ ····		
5					P. sick.]				
6	130 K.	•••	29		28					
Etc.										

Returns showing Patwaris' Circles inspected during fortnight ending.

The plain figures indicate chains of partal and K denotes khasra entries checked.

22. On the completion of patwaris' records all subsidiary statements must be listed, enclosed in paper wrapper and filed as B file of map amendment. The number of sheets or pieces of each statement should be recorded in list as below. B file will contain the following :--

1.	List of papers			1
2.	Fard partal	•••	•••	1
3.	Fard chakwar		•••	5 sheets.
	Fard mukabla arazi khet		•••	6,,
5.	Parcha-sir and khudkash	t	•••	4,,,
	Parcha kisan		•••	50
7.	Parcha gair mumkin		•••	1

APPENDIX No. C.

Note on Hindi Office work.

The procedure followed in the preparation of Hindi records is given below stage by stage :--

(1) Comparison of khasras with map by Inspectors	Outturn fixed 1,000 numbers a day.
(2) Comparison of attestation khewat, bagat rafai am, dispute list, &c. English orders were read to the patwari by the English-knowing Inspector.	No average was fixed (an hour's work).
(3) Comparison of attestation khases with attestation jamabandi by the circle patwari only.	1,000 numbers a day.
(4) Copying of patwari copy of khasra by the circle patwari	250 numbers a day.
(5) Comparison of khasra entries (columns 8 to 13) by patwari only.	2,000 khasra numbers a day.
(6) Comparison of map with the fardzamin by Inspectors	3,000 numbers a day.
(7) Entering soils in the khasra by the circle patwari	1,500 numbers a day.
(8) Comparing soils in the khasra with the fardzamin (a patwari of another circle assisted the circle patwari).	Outturn 4,000 numbers a day.
(9) Preparation of chittamilan khasra and jinswar by patwaris	1,000 numbers a day.
(10) Copy of jamabandi by patwari	Average 1,500 numbers
Misl was then transferred to the Inspector and the procedure bilowed by him in checking the misls is given below.	a day.
(11) Checking of attestation misls, viz., comparison of khewat with jamabandi, column 3; comparison of sir, khudkasht absolute-occupancy, malik-makbuza area, siwai income checking of remark column of khasra regarding the possession of tanks and mango trees, &c. entoring the amount from the improvement list in the remark column of the khasra and comparing entry in the dispute list (Hindi-knowing Inspectors used to get the orders read by English-knowing Inspectors) and comparison of irrigated area with the chitta jinswar and milan khasra.	; e 5 6 9 1
(12) Checking chitta jinswar and milan khasra 10 per cent	No average was fixed.
(13) Checking of fardzamin with khasra, column 3, 10 per cent.	No average was fixed.
 (14) Comparison of khasra and jamabandi, 10 per cent. (patwar copy). Circle patwari assisted. 	i Average 1,500 numbers a day.
The misl was then given to the Assistant Settlement Officer in harge. The Assistant Settlement Officer checked a few entrie nd passed the misl which was then given into the English Office.	
Fair copying of records for the Sadar copy.	
(15) Fairing of khasra for Sadar copy	· 250 numbers a day.
(16) Fairing of jamabandi for Sadar copy	1,500 numbers a day.
(17) Miscellaneous papers for the settlement misl (Sadar copy copying for khewat, fehrist kagjat, jinswar mila khasra, jamabandi goshwara, titamba milan khasra fehrist tarakki, sir shartia for patwari and Sadar copy list of erasures.	n •,

APPENDIX No. D.

Form of Wajib-ul-arz sanctioned for the Khalsa portion of the Raipur District.

Heads.	Details of Rules and Customs.
I.—Representation of co-sharers by lam- bardars,	Co-sharers can only act through the lambardar in the collection of rents, the letting of land, the enhancement of rents, and generally in the management of the mahal. No trees can be felled in a village waste without the consent of all the co-sharers.
II.—Relation of malguzars with ten- ants.	In regard to such matters as rent collection, rent enhancement and ejectment, and in their dealings with their tenants, generally, the malgazars shall abide by the provisious of the Tenancy Act and the rules made under it, and shall not recover cesses over and above the rent, save such as are warranted by law. Where any rent has been fixed by the Settlement Officer in money, rent in kind shall not be domanded.
III.—Legitimate vil- lage expenses and mode of providing for them.	The co-sharers are liable to contribute in proportion to their shares to any expenditure legitimately incurred by the lambardar in his capacity of manager of the mahal. No contributions are taken from tenants.
cluded in the mahal.	Forest land included in the mahal is managed in accordance with any rules which may be issued from time to time by the Deputy Com- missioner, under the orders, or with the approval, of the Chief Commis- sioner. If the malguzar infringes these rules, Government reserves to itself the right to rescind the settlement.
	We agree to keep up the boundary line between our village and the adjoining Government forest. Each year the line shall be cleared to the width of 20 feet on our side of the boundary line.
V.—Appointment of lambardar.	On the office of iambardar falling vacant the co-sharers elect one of their members for the post; but their nominee may be rejected by the Deputy Commissioner in which case a fresh nomination is made.
	(Number of watchmen to be stated and their names, details of rent- free service land, if any, followed by details of fees from malguzars and tenants fixed in accordance with the rules of the district).
	The kotwar's fees for measuring grain are calculated at the following rates :
VII.—Other village servants.	(Details of all servants in village, of rent-free land, if any, held by them, the names of present incumbents and their customary remuneration).
rent or revenue-free, or at privileged rates	(Serial number of holding, area, and revenue or rental assessed to be stated, with name of present holder, right in and conditions on which he holds, and details of any payment to be made).
tenants over waste land and over grass and trees growing on land included in their holdings.	Waste land cannot be taken up without the permission of the lambardar, but agriculturalists have the right of grazing agricultural cattle over it free of charge. The lambardar shall not, by letting the grazing or otherwise, prejudice the nistar rights of agriculturalists over existing waste land. Agriculturalists have also the right to cut on the village waste, free of charge, and with the permission of the lambardar, grass, leaves, brushwood for fuel, thorns for fencing their fields and threshing- floors, and babul trees for agricultural implements, and to exercise any other customary right of nistar recognized in the village. Should the lambardar refuse permission, the agriculturalists may obtain authority from the Deputy Commissioner to exercise all such rights. In the event of any dispute arising the Deputy Commissioner will, on the application of either party, decide whether any demand is in accordance with custom or not.
	The term "Agriculturalists" comprises all who make a living from direct connection with agriculture, and in it are included not only tenants but also agricultural labourers.
	The term "Agricultural cattle" means cattle primarily and habi- tually used in the village (a) for agricultural purposes, or (b) for his own domestic necessities, by the agriculturalist owner.

 slaughter-grounds and No. is set aside for skinning and entiting up extile; Plot No. is the 'kaplasta' (Mindh numd-ground or huraing-ground). The nudgex will not bimself cultivators encreash upon them, nor will he authorizo or permit any other person to do so. They will always remain open for the bary will have been by the community for the purpose for which they are now so apart, nuless, with the consent of the community, they are exchanged to some equally mitable pieces of ground. Any such charge shall he reported by the privari to the Databilar. XI.—The village site. XI.—The village roads, paths and dharess end threshing floors, free of charge, but ray rent for granem cultivated by them round such houses. A cultivator who has built house lose his right to the house if he absconds from the village, but i ejected by us from his land he may sell or remove the materials of houses. The village roads, paths and dharess. XII.—Village roads, paths and dharess are to be kept open and an resch precision and rights to water are shown in the challe house of encreachement, and should he be unable to prevent any source of irrigation and rights to water are shown in the challe below. XIII.—Irrigation. XIII.—Irrigation. XIII.—Irrigation. XIV.—Sugarcane cultivator encore the near source of irrigation, so as to prejudit existing rights to vater. <i>Form of Schedule</i>. Khasra number of tank or other source of irrigation, so as to prejudit existing rights to vater. <i>Form of Schedule</i>. Khasra number of tank or other source of irrigation, so as to prejudit existing rights to vater. <i>Form of Schedule</i>. Khasra number of tank or other source of irrigation and i name. Name of owner. Khasra numbers of fields irrigatod. Pravention of sources. Khasra numbers of fields irrigatod. Remarks. (Practice is variable. The arrangements followed hitherto should i clearly set out, with a hote of any	Heads.	Dotails of Rules and Customs.
 site. boases and threshing floors, free of charge, but pay rent for graden diviated by them round such houses. A cultivator who has bailt bouse loses his right to the house if he absconds from the village, but i ejected by us from his land he may sell or romove the materials of h bouse. Persons who nother hold land in the village near are village servants, can build houses only on such terms as may be agreed upo with the lambardar. XII.—Village roads, The village roads, paths and dharsas are to be kept open and as not to be encreached upon. The lambardar is responsible for the prevention of encreachment, and should he be unable to prevent any successement to matter to the Deputy Commissioner. XIII.—Irrigation. XIII.—Irrigation. Water can only be taken at such time as are agreed upon an under such precentions any be necessary to ensure fair distribution. The owner of any source of irrigation is expected to keep it i proper repair, and if he fulls to do so any person interested in the wate supply may excents the necessary reputy according to custom. The owner shall not make or authorize any extension of cultivatio in the bed of a tank or other source of irrigation, so as to prejudic existing rights to water — Form of Schedule. 1. Khasra number of fields irrigated. 4. Payment, if any, apart from assessed rent, made for right of tak repairs, &c.) XV.—Sugarene endered below. 3. Remarks. (Practico is variable. The arrangements followed hitherto should lelearly set out, with a note of any barge for irrigation, responsibility for tak repairs, &c.) The bit-begar demandable from tenants in this village will ident be does not hold land. 3. Tenants are at likely to commute bhet-begar in a village which he does not hold land. 3. Tenants are at likely to commute bhet-begar into a mor payment at the following rates :— 	slaughter-grounds and	No. is set aside for skinning and cutting up cattle; Plot No. is the 'marghat' (Hindu burial-ground or burning-ghat); and Plot No. is the 'kabrastan' (Muhammadan burial-ground). The malguzar will not himself cultivate or encroach upon them, nor will he authorize or permit any other person to do so. They will always remain open for free use by the community for the purpose for which they are now set apart, unless, with the consent of the community, they are exchanged for some equally suitable pieces of ground. Any such change shall be
 paths and dharsas. paths and dharsas. paths and dharsas. xIIIIrrigation. XIIIIrrigation. XIIIIrrigation. Existing sources of irrigation and rights to water are shown in the schedule below. Water can ouly be taken at such time as are agreed upon an under such precautions as may be necessary to ensure fair distribution. The owner of any source of irrigation is expected to keep it i proper repair, and if he fails to do so any person interested in the wate supply may execute the necessary repairs, provided that by so doin he shall not make or authorize any extension of cultivation in the bed of a tank or other source of irrigation, so as to prejudic existing rights to water		houses and threshing floors, free of charge, but pay rent for gardens cultivated by them round such houses. A cultivator who has built a house loses his right to the house if he absconds from the village, but if ejected by us from his land he may sell or remove the materials of his house. Persons who neither hold land in the village nor are village servants, can build houses only on such terms as may be agreed upon
 schedule below. Water can only be taken at such time as are agreed upon an under such precations as may be necessary to ensure fair distribution. The owner of any source of irrigation is expected to keep it ip proper repair, and if the fails to do so any person interested in the water supply may execute the necessary repairs, provided that by so doin he shall not acquire any right, save that of water-supply according to east of the bed of a tank or other source of irrigation, so as to prejudic existing rights to water :- <i>Form of Schedule</i>. 1. Khasra number of tank or other source of irrigation and i name. 2. Name of owner. 3. Khasra numbers of fields irrigated. 4. Payment, if any, apart from assessed rent, made for right of taking water. 5. Remarks. (Practice is variable. The arrangements followed hitherto should i clearly set out, with a note of any charge for irrigation, responsibility f tank repairs, &c.) XVServices rendered to malguzars by the het-begar is leviable for any purpose other than the above mentioned. 2. A tenant is not liable to render bhet-begar in a village which he does not hold land. 3. Tenants are at liberty to commute bhet-begar into a mon payment at the following rates : 		not to be encroached upon. The lambardar is responsible for the prevention of encroachment, and should he be unable to prevent any such
 under such precautions as may be necessary to ensure fair distribution. The owner of any source of irrigation is expected to keep it is proper repair, and if he fails to do so any person interested in the water supply may execute the necessary repairs, provided that by so doin he shall not acquire any right, save that of water-supply according to custom. The owner shall not make or authorize any extension of cultivation in the bod of a tank or other source of irrigation, so as to prejudic existing rights to water:— <i>Form of Schedule.</i> 1. Khasra number of tank or other source of irrigation and in name. 2. Name of owner. 3. Khasra numbers of fields irrigated. 4. Payment, if any, apart from assessed rent, made for right of taking water. 5. Remarks. (Practice is variable. The arrangements followed hitherto should in cultivation. XV.—Services ren- dered to malguzars by tenants. 1. No bhet-begar demandable from tenants in this village will it only as entered below. 2. A tenant is not liable to render hhet-begar in a village which he does not hold land. 3. Tenants are at liberty to commute bhet-begar into a mon payment at the following rates :— 	XIIIIrrigation.	Existing sources of irrigation and rights to water are shown in the schedule below.
 The owner of any source of irrigation is expected to keep it is proper repair, and if he faile to do so any person interested in the water supply may execute the necessary repairs, provided that by so doin he shall not acquire any right, save that of water-supply according to ustom. The owner shall not make or authorize any extension of cultivation in the bod of a tank or other source of irrigation, so as to prejudic existing rights to water: — <i>Form of Schedule</i>. 1. Khasra number of tank or other source of irrigation and i name. 2. Name of owner. 3. Khasra numbers of fields irrigated. 4. Payment, if any, apart from assessed rent, made for right of taking water. 5. Remarks. (Practice is variable. The arrangements followed hitherto should licearly set out, with a note of any charge for irrigation, responsibility f tank repairs, &c.) XV.—Services rendered below. 1. No bhet-begar demandable from tenants in this village will be only as entered below. 2. A tenant is not liable to render bhet-begar in a village which he does not hold land. 3. Tenants are at liberty to commute bhet-begar into a mon payment at the following rates :— 		Water can only be taken at such time as are agreed upon and under such precautions as may be necessary to ensure fair distribution.
The owner shall not make or authorize any extension of cultivation in the bed of a tank or other source of irrigation, so as to prejudic existing rights to water:—Form of Schedule.1. Khasra number of tank or other source of irrigation and i name.2. Name of owner.3. Khasra numbers of fields irrigated.3. Khasra numbers of fields irrigated.4. Payment, if any, apart from assessed rent, made for right of taking water.5. Remarks. (Practice is variable. The arrangements followed hitherto should l clearly set out, with a note of any charge for irrigation, responsibility f tank repairs, &c.)XV.—Services ren- dered to malguzars by tenants.1. No bhet-begar is leviable for any purpose other than the above mentioned.2. A tenant is not liable to render bhet-begar in a village which he does not hold land.3. Tenants are at liberty to commute bhet-begar into a mon payment at the following rates :—		The owner of any source of irrigation is expected to keep it in proper repair, and if he fails to do so any person interested in the water- supply may execute the necessary repairs, provided that by so doing he shall not acquire any right, save that of water-supply according to
 Khasra number of tank or other source of irrigation and i name. Name of owner. Khasra numbers of fields irrigated. Payment, if any, apart from assessed rent, made for right of taking water. Remarks. (Practice is variable. The arrangements followed hitherto should help tank repairs, &c.) XVServices rendered to malguzars by tenants. No bhet-begar demandable from tenants in this village will help to a sentered below. No bhet-begar is leviable for any purpose other than the above mentioned. A tenant is not liable to render bhet-begar in a village which he does not hold land. Tenants are at liberty to commute bhet-begar into a mon payment at the following rates : 		The owner shall not make or authorize any extension of cultivation in the bed of a tank or other source of irrigation, so as to prejudice existing rights to water :
 2. Name of owner. 3. Khasra numbers of fields irrigated. 4. Payment, if any, apart from assessed rent, made for right of taking water. 5. Remarks. (Practice is variable. The arrangements followed hitherto should here of any charge for irrigation, responsibility for tank repairs, &c.) XVServices rendered to malguzars by tenants. 1. No bhet-begar demandable from tenants in this village will here only as entered below. 1. No bhet-begar is leviable for any purpose other than the above mentioned. 2. A tenant is not liable to render bhet-begar in a village which he does not hold land. 3. Tenants are at liberty to commute bhet-begar into a mon payment at the following rates : 		1. Khasra number of tank or other source of irrigation and its
 3. Khasra numbers of fields irrigated. 4. Payment, if any, apart from assessed rent, made for right of taking water. 5. Remarks. (Practice is variable. The arrangements followed hitherto should help to any charge for irrigation, responsibility for tank repairs, &c.) XVServices rendered to malguzars by tenants. 1. No bhet-begar demandable from tenants in this village will help to any purpose other than the above mentioned. 2. A tenant is not liable to render bhet-begar in a village which he does not hold land. 3. Tenants are at liberty to commute bhet-begar into a mon payment at the following rates : 		
XIVSugarcane cultivation.5. Remarks.XIVSugarcane cultivation.(Practice is variable. The arrangements followed hitherto should i clearly set out, with a note of any charge for irrigation, responsibility f tank repairs, &c.)XVServices ren- dered to malguzars by tenants.The bhet-begar demandable from tenants in this village will i only as entered below.1. No bhet-begar is leviable for any purpose other than the above mentioned.1. No bhet-begar is leviable for any purpose other than the above mentioned.2. A tenant is not liable to render bhet-begar in a village which he does not hold land.3. Tenants are at liberty to commute bhet-begar into a mon payment at the following rates :		
 XIV.—Sugarcane cultivation. XV.—Services rendered to malguzars by tenants. 1. No bhet-begar is leviable for any purpose other than the above mentioned. 2. A tenant is not liable to render bhet-begar in a village which he does not hold land. 3. Tenants are at liberty to commute bhet-begar into a more payment at the following rates :— 		
 cultivation. clearly set out, with a note of any charge for irrigation, responsibility for tank repairs, &c.) XV.—Services rendered to malguzars by only as entered below. 1. No bhet-begar is leviable for any purpose other than the above mentioned. 2. A tenant is not liable to render bhet-begar in a village which he does not hold land. 3. Tenants are at liberty to commute bhet-begar into a mompayment at the following rates :— 		5. Remarks.
 XV.—Services rendered to malguzars by tenants. 1. No bhet-begar is leviable for any purpose other than the above mentioned. 2. A tenant is not liable to render bhet-begar in a village which he does not hold land. 3. Tenants are at liberty to commute bhet-begar into a mompayment at the following rates : 	XIV.—Sugarcane cultivation.	(Practice is variable. The arrangements followed hitherto should be clearly set out, with a note of any charge for irrigation, responsibility for tank repairs. &c.)
above mentioned. 2. A tenant is not liable to render bhet-begar in a village which he does not hold land. 3. Tenants are at liberty to commute bhet-begar into a mon payment at the following rates :	dered to malguzars by	The bhet-begar demandable from tenants in this village will be
which he does not hold land. 3. Tenants are at liberty to commute bhet-begar into a mon payment at the following rates :		
3. Tenants are at liberty to commute bhet-begar into a mon payment at the following rates :		2. A tenant is not liable to render bhet-begar in a village in which he does not hold land.
		3. Tenants are at liberty to commute bhet-begar into a money
Two annas for a labourer.		Two annas for a labourer.

Heads.	Details of Bules and Customs.
XVI.—Dues from bazars or sarais.	Proprietors are not entitled to levy any dues on bazars held in their villages or to realize any commission on sales effected.
XVII.—Disposal of hides and carcasses of dead animals.	
XVIII.—Payments of inferior proprietors on account of mali- kana and cesses. Pro- tected thekadars and their payments.	granted a protected status under Section 65-A of the Land Revenue Act.
XIXSpecia clauses pertaining to the village.	•



Secretariat Press, Nagpur :- T. P. B., 9-5-1903-250.

