

CHAPTER XXV.

EXPENDITURE ON SURVEY AND SETTLEMENT.

621. The important subject of expenditure must here be treated of somewhat briefly as the accounts have not been finally audited.

Introduction.

The expenditure shown in this Chapter is therefore taken from the annual reports, and includes all payments up to the 1st January 1900.

622. The first detailed estimate of cost is to be found in a note prepared by the Director of Land Records in February, 1891. *

In that note (paragraph 23) a provisional estimate of Rs. 13,07,809, viz., Rs. 6,12,747 for survey and Rs. 6,95,062 for settlement, was made against a previously sanctioned estimate of Rs. 14,03,981. It was not long before it became evident that this estimate must be largely exceeded, but it does not appear to have been foreseen by anyone that the total expenditure would be more than 30 lakhs of rupees. Comparing the original estimate with the actual expenditure up to the 1st January 1900, we find —

		Survey	Settlement.	Total.
Estimate	....	6,12,747	6,95,062	13,07,809
Actual	....	9,43,091	23,45,426	32,88,517

Thus the original estimate for survey was a little more than half, and that for settlement rather less than a third, of the actual cost.

To some extent the difference is due to operations not included in the original estimate viz :—

Nature of operation not included in the original estimates.		Survey Expenditure.	Settlement Expenditure.
Settlement of—			
Khurda	....	....	1,40,306
Ekhradjats	....	7,126	30,584
Killa Aul	....	8,519	21,270
Killa Darpan	....	10,635	
Killa Madhupur	....	9,075	19,253
Total	....	35,355	2,11,413

On these accounts an allowance of Rs. 2,46,768 is to be made in the errors of the original estimate, but this still leaves a very great excess, which appears to be due in part to the defects in the early *khanapuri* and attestation, and partly to the failure to work out and carry through from the beginning a definite plan, but chiefly to the fact that the original estimate made practically no allowance for the cost of the later stages of the work; for the disposal of case work, for the completion and copying of the records, and for the settlement of revenue for over 6,000 estates; in fact, for the stages which have occupied the Settlement Department for the last two-and-a-half years.

623. The expenditure on survey (excluding revision survey in Cuttack and Khurda) is shown by the

Cost of Survey operations.

* Appendix A (1)

Surveyor-General to have been Rs. 9,19,955, of which details are given in the following statement :—

Statement showing the cost of cadastral survey in Orissa.

DISTRICT.	Season of Survey	COST, IN RUPEES, OF —					Total.	Remarks.
		Traver- sing.	Demar- cation	Cadastral survey.	Record writing.	Badar correction.		
1	2	3	4	5	6	7	8	9
Puri	1889-95	64,904	....	1,26,315	33,158	.....	2,24,377	Exclusive of Rs. 2,507 expended on standard maps and Rs. 4,862 expended on 2-inch topographical survey.
Cuttack	1889-95	94,843	1,220	2,11,936	1,01,326	.....	4,09,325	Exclusive of Rs. 2,304 expended on standard maps and Rs. 18,662 expended on 2-inch topographical survey.
Balasore	1890-95	64,164	2,027	1,53,515	54,787	.....	2,74,493	Exclusive of Rs. 5,603 expended on 2-inch topographical survey.
Orissa and Khurda....	1896-1900	.....	.....	.....	.....	11,760	11,760	
Total ...	.....	2,23,911	3,247	4,91,766	1,89,271	11,760	9,19,955	

N. B.—The figures in this statement are exclusive of the cost of revision of Cuttack Irrigation Survey of 1878-79 (Rs. 23,146) and of 4 per cent. for the cost of instruments.

Deducting Rs. 35,355, the cost of survey in the Ekhradjats, Aul, Darpan, and Madhupur, and adding Rs. 23,146 for revision survey in Cuttack, the cost of survey of the temporarily-settled and revenue-free lands in Cuttack, Balasore, and Puri *sadar* is Rs. 9,07,746.

The area surveyed for this sum is about, 4,797 square miles, giving an average cost of Rs. 181 per square mile for the cadastrally-surveyed area.

624. The total expenditure from the beginning of the operations up to date is shown in the returns as Rs. 23,45,426. This Settlement expenditure. includes all actual disbursements, but there still remain to be added certain charges on account of supervision, pension charges, cost of tents, forms and stationery, that cannot at present be calculated. Some deductions, too, may be hereafter made on account of process and other fees received and paid into the treasury, for the proceeds of sales of old stationery and furniture, and for court-fee stamps. With this proviso I proceeded to show on what account the expenditure has been incurred; and first as to the division by local areas.

Besides the settlement of the temporarily-settled Parganas, the above figures includes the cost of settlement of the Khurda *khas mahal* which has formed the subject of a separate report; of the temple or *ekhrajat* lands in Puri, which has been made at the cost of the Superintendent of the Temple; of Aul and Darpan, which have been made partly at the expense of Government and partly at that of the proprietors, the question of the ultimate division of the cost being still under consideration; of the small Village of Uparabast, paid for by the proprietor; and of Jamuna Jharpara, which is to be paid for by the landlord or tenants; and also of the Ward's estate of Madhupur, paid for by the Court of Wards; as well as of the revenue-free and *khandaiti* villages within the sub-division of Khurda.

These items are, however, shown separately, and I have calculated the cost of settlement in the Puri and Balasore Districts, basing my estimates on the figures supplied by Mr. H. Mc. Pherson and Mr. Kingsford. These figures were really too low, for they did not include the proportionate share of the expenditure

of the head office in Cuttack, for which about half a lakh has been added to either district, a corresponding deducting being made from the Cuttack figures :—

YEAR	Cuttack.	Puri.	Khurda	Balasore	Ekhraraj	Ant and Darpan	Madhu- pur.	Uparbast and Jamuna Jharpara.	Bhubanes- war and revenue- free and Khandait tenures of Puri.	Total.
1	2	3	4	5	6	7	8	9	10	11
Up to 31st Sep- tember, 1891 ..	Rs. 11,367	Rs. 33,902	Rs.	Rs. 330	Rs.	Rs.	Rs.	Rs.	Rs.	Rs. 45,599
1891-92 ..	46,420	1,54,931	....	2,707	....	3,974	....	....	....	2,08,032
1892-93 ..	1,42,967	7,564	....	27,481	....	7,749	1,848	....	....	1,87,609
1893-94 ..	1,26,738	145	....	37,022	....	2,372	5,726	....	....	1,72,003
1894-95 ..	1,06,395	....	....	83,207	....	1,687	2,103	....	....	1,93,392
895-96 ..	1,40,739	54,965	18,576	90,099	5,233	....	....	....	....	3,09,962
1896-97 ..	2,20,976	98,115	86,000	1,21,487	812	....	....	....	....	5,28,190
897-98 ..	1,87,210	50,000	33,655	1,06,505	....	....	9,576	....	....	3,86,946
1898-99 ..	1,63,095	15,578	1,775	66,583	13,120	5,191	....	864	3,926	2,76,132
1899-1900 January ..	27,810	890	....	3,145	3,732	1,984	....	....	....	37,561
Total ..	11,73,767	4,10,890	1,40,366	5,38,566	30,584	21,270	19,253	864	3,926	23,45,423
Adjusting cost of supervision.	10,73,767	4,60,890	1,40,306	5,88,566	30,584	21,270	19,253	864	3,926	23,45,426

625. The total cost may approximately, as regards the stages of the work in the temporarily-settled areas, be divided as follows over the three districts :—

	Cuttack Rs.	Puri Rs.	Balasore Rs.	Total Rs.
Inspection of <i>Khanapuri</i>	75,000	40,000	33,000	1,48,000
Attestation	4,80,000	2,05,000	1,80,000	8,65,000
Settlement of rents	1,86,000	58,000	1,01,000	3,45,000
Case-work, etc.	61,000	15,000	50,000	1,26,000
Assessment of Revenue	1,90,000	38,000	67,000	2,95,000
Miscellaneous Total	1,82,000	60,000	1,08,000	3,50,000
Total	11,74,000	4,16,000	5,39,000	21,29,000

The first item is a comparatively small one, and includes only the share of the *khanapuri* expenditure met from the settlement budget, and consists chiefly of the pay of the head office and of the *khanapuri* officers.

Under attestation I have included both the expenditure on the original attestation and that incurred in re-attesting and preparing the records for settlement of rents. The expenditure is lightest in Balasore, where very little work had to be re-done, while in Cuttack it is swelled by the inclusion of about 1½ lakhs on account of the pay of the Settlement Officer and his office. Settlement of rents explains itself; the cost is lower in Puri than in the other districts, partly because a larger share of the expenditure of 1896-1898 has been debited to re-attestation, and partly because the officers employed in Puri were on the whole lower paid. Most of the pay of the head office and of the Assistant Settlement Officers in charge during 1896 and 1897, *i. e.*, about one lakh, is debited to this head.

Case-work covers all the expenditure incurred during the period of draft publication on the disposal of objections and the trial of suits under section 106. It was lowest in Puri because draft publication followed very promptly on re-attestation, and the people appear, moreover, to have been backward in filing objections. It was highest in Balasore owing to the large crop of cases, especially in the neighbourhood of Balasore town.

Settlement of Revenue includes the expenditure incurred in writing completion reports for over 6,000 estates, for disposing of the proprietors' objections and taking *kabuliyats*, and includes most of the pay of the Settlement Officer and the Assistant Settlement Officers in charge for 1897-98 and 1898-99. Under "Miscellaneous," come the cost of copying the record-of-rights (about 1½ lakhs), of revising the proofs of the new survey maps and of re-numbering villages (about Rs. 10,000), of preparing *milan khasras* and other statistical statements, of miscellaneous enquiries such as those into the effects of irrigation and protection, of the handing over and destruction of records and of the writing of the final report; including a share of the expenditure of the head office and a large part of my own and Mr. Webster and Mr. Kingsford's pay during the last year.

626. Taking the area as before at 4,797 square miles, the average cost of the principal stages of the work is as follows :—

Incidence of cost.

Stage		Per square mile (in rupees)	Per acre (in annas)
<i>Khanapuri</i>	....	30.8	.77
Attestation	....	180.3	4.51
Settlement of rents	....	71.9	1.80
Case-work	....	26.3	.66
Assessment of Revenue.*	....	71.1	1.77
Others	....	72.9	1.82
Total cost of Settlement	....	453.3	11.33

* Calculated on the temporarily-settled area of 4,150 square miles, i.e., excluding revenue free areas, Chilka Lake, Government lands, etc.

The expenditure on survey has already been estimated at Rs. 181 per square mile, or 2.96 annas per acre. Thus the total cost of the operations in the temporarily-settled area works out to 14.29 annas per acre.

S. L. Maddox.
Settlement Officer.

DEPARTMENT OF LAND RECORDS AND AGRICULTURE, BENGAL.

No. 1549S.

From

P. C. Lyon, Esq. I. C. S., *Director of the Department of Land Records and Agriculture, Bengal.*

To

The Secretary to the Board of Revenue, L. P.

Dated Calcutta, the 24th July, 1900.

Sir,

I have the honour to submit herewith, for the orders of the Board and of Government, the Final Report of the Settlement of the Province of Orissa by Mr. S. L. Maddox, I. C. S., together with the volume of appendices attached to it, and the maps which have been prepared to illustrate it. The report, which has not as yet been finally printed off, was submitted to me by Mr. Maddox just before he left India on furlough in March last, but will not be ready for publication in its finally corrected form for some few weeks to come.

2. The report is voluminous and is complete in every respect, such information as could not be included in the body of the report being given in full in the appendices.

Introductory.
Unlike most other temporarily-settled areas in India, the Province of Orissa had not known settlement operations for sixty years, and this circumstance alone, while adding greatly to the difficulty and the cost of the present proceedings, has rendered it necessary to summarise, as far as possible, in the Final Report the considerable changes that have taken place during the currency of the expiring settlement, and to present to Government a complete and exhaustive review of the economic condition of the Province. It is true that the late Sir William Hunter and Mr. George Toynbee have in recent years written at length on the history and circumstances of Orissa, but the present settlement proceedings have in themselves contributed so much new material for the illustration of the subject, that the existence of their works has not absolved Mr. Maddox from the duty of dealing very fully with the subject before him. The Final Report now submitted is a veritable Encyclopaedia of the Province, dealing with its history, its peoples, its agriculture and its material prosperity, while detailing at the same time the fiscal history of the temporarily-settled areas under settlement, the proceeding undertaken for their resettlement, and the results of those proceedings, both as they have affected Government and the people.

3. The following is the general arrangement of the report, which is divided into six parts. The first of these contains physical and statistical accounts of each of the three districts of Cuttack, Balasore and Puri; the second deals with agriculture, irrigation and the material condition of the people; the third is mainly historical, but combines with the fiscal history of the Province an exhaustive account of the various tenures upon which land is held within it; the fourth deals with the procedure adopted in the course of the various stages of the recent settlement proceedings; the fifth summarises the results of those proceedings, and the sixth gives an account of the revenue-free and other areas excluded from the present settlement, concluding with a brief chapter on the cost of the operations. The appendices to the report consist of a reprint of the most important correspondence connected with the settlement, a collection of the various rules under which the operations were conducted, some thirty-eight statistical and descriptive statements illustrating the report, and the detailed reports on the districts of Puri and Balasore, written by Mr. H. McPherson, I. C. S., and Mr. D. H. Kingsford, I. C. S., respectively. While it was not, perhaps, wholly necessary that these two latter reports should be reproduced, they are of considerable value in themselves, and

Arrangement of
the report.

it would have been a matter for regret had they been left unpublished. A perusal of the report will also show that Mr. Maddox has not been able to avoid some repetition, the subjects allotted to different sections of the report being in some cases so nearly allied as to render this inevitable; but such repetition as there is has served to make each separate part of the report complete in itself, and is for that reason the less to be deprecated.

4. It is unnecessary for me to deal at any length with the subjects treated in the earlier chapters of the report. The interesting paragraphs, in the Chapters containing physical accounts of Cuttack and Puri, which deal with the question of embankments, especially those which relate to the districts of Puri will be doubtless commended by Government to the special attention of the Public Works Department, and the effect that the escape of flood water through certain breaches in those embankments has had on the material prosperity and revenues of some of the eastern parganas of that district is already the subject of a reference to Government. The chapter on irrigation (paragraphs 103 to 118) contains a full report on the subject of the imposition of an owner's rate on lands irrigated or irrigable from Government canals, which will be dealt with in a separate communication, in answer to the call made by Government for a special report on this subject. The agricultural chapter (paragraphs 119 to 159) contains much information of interest which will serve to supplement Mr. N. N. Banerjee's valuable report on the agriculture of Cuttack, and deals in special detail with the great rice crop and with *pan*, the latter a crop which is likely to prove of increasing value to the cultivators as the Province is opened out. The Chapter on the History of Prices deals with the fluctuations in the price of common rice, which is by far the most important crop in Orissa, and contains a most instructive diagram showing those fluctuations during the past sixty years, a picture of the varying circumstances of the people during that period which could not well be improved upon. There is much in the chapter on the material condition of the people that affords food for reflection and comment, notably, in the description given of the character of the people, which appears to bear in many respects as a likeness to that of the Assamese, though the Uriyas are differentiated from the Assamese in that they are always ready to emigrate and travel in search of work. This readiness to emigrate on the part of the male population—for the emigrants are never accompanied by their families—is a marked characteristic of the Uriya, and is in pleasing contrast to the immobility of the Biharis and the northern races of India. It proved an undoubted safeguard to the population of Orissa at the time of the great famine, and contributes greatly in the present day to the prosperity of this corner of the Empire. On the subject of stocks of grain, with which Mr. Maddox deals in paragraphs 178 and 197, I fear we have little or no information at present. In the year 1897, after careful local enquiry, the Commissioner of the Division estimated that the stocks of rice in hand would not last beyond August in that year, whereas there was a brisk export throughout the year, without any importation to supplement the local stocks.

Mr. F. E. Pargiter, I. C. S., has been kind enough to scrutinise the Chapter on the early geography and history of Orissa, and in the interesting paragraphs which have been devoted to the peoples and religions of the Province, Mr. Maddox has drawn freely from many acknowledged authorities, such as Mr. H. H. Risley, I.C.S., C. I. E., Dr. Rajendra Lala Mitra, Dr. Stevenson, Mr. Stirling and Captain S. C. Macpherson.

5. The area of the Province of Orissa amounts to over 24,000 square miles, and may be roughly divided into the hills (17,000 square miles), in which are included the Tributary States, the district of Angul, and the Government Estate of Khurda in Puri, and the alluvial plains (7,000 square miles), lying between these hills and the sea. Some account of the Tributary States is given in Chapter XXIV of the Report.

The District of Angul, a resumed State, was surveyed and settled some years back, and the Government Estate of Khurda has recently been settled under Mr. Maddox's supervision, and a separate report of the settlement

submitted. The following statement shows roughly the various areas that go to make up the plains portion of the Province :—

	Square miles.
Temporarily-settled areas	4,200
Revenue-free areas	524
Permanently-settled areas cadastrally surveyed	546
Permanently-settled areas topographically surveyed.	1,420
The Chilka Lake.	310
Total	7,000

The present report deals in detail with the survey and settlement of the first two of these classes only, but a brief account is given also in Chapter XXIV of the circumstances in which some of the permanently-settled estates came to be cadastrally surveyed. A special chapter (Chapter XXIII) is devoted to the revenue-free areas included in the 524 square miles noted above, but they are also included in the general sections of the report. On the other hand, the statistics of cultivation which are given in Appendices E and F include not only the Khurda Government Estate, but also about 150 square miles of the permanently-settled and cadastrally-surveyed area, or 5,897 square miles in all.

6. These figures of cultivation and crops show that out of an area of 5,897 square miles, comprised in 13 589 villages, 3,903 square miles (or 66 per cent.) are cultivated, 544 (or 9 per cent) are culturable but not cultivated, while 1,450 (or 25 per cent.) are unculturable. Out of the uncultivated area, 177 square miles or 3 per cent. of the total area, have been formally reserved as grazing or cremation grounds, as detailed in Appendix L, and encroachment on these reserves has been strictly forbidden. It is unnecessary to dilate at any length on the crop areas shown in Appendix F. It is sufficient to note that 3,439 out of a net cropped area of 3,903 square miles bear a rice crop; that 178 square miles are homestead lands, and 307 square miles (including some of the rice-lands) are twice cropped.

7. Within the same area as that for which cultivation has been shown, I find that the figures entered in the following table represent generally the average size of a village in Cuttack, the extent of each tenant's holding, and the size of each field, district by district :—

	Cuttack Acres.	Balasore Acres.	Puri Acres.
Size of each village	301	304	324
Size of each holding (excluding waste lands)	1.26	1.86	1.82
Size of each field			
(1) Including waste plots	.34	.48	.29
(2) Excluding waste	.23	.34	.20

The average actual area of land held by each individual raiyat would of course be considerably in excess of the size of the average holding, as many raiyats hold more than one holding, and from figures given elsewhere in the report, it may be gathered that the average holding of an agriculturist (as distinguished from labours holding only homestead lands something over three acres for the Province generally.

8. As to the classes of people who occupy the three districts of Cuttack, Balasore and Puri, the greater portion of which is included in the above statistics of area, it is sufficient to say that out of a total of 4,200,000 inhabitants, no fewer than 4,093,000 are said to be Hindus, while of the rest, 98,000 are Mahomedans, 4,000 Christians, and 8,000 belong to other religions. In paragraph 219 is given an interesting table of the various castes to which the members of the Hindu population belong, and in paragraph 170 a division of the population by occupations is given, from which it appears that over 2½ millions are returned as agriculturists.

9. Turning now to the area of 4,750 square miles with which the report is chiefly concerned, it will be well to make some reference to its fiscal history before dealing with its present circumstances. Mr. Maddox treats of the early settlements of the Province, before the commencement of British rule, in paragraphs 233 to 241 of the report, which should be read with paragraph 547, in which an attempt is made to discover what revenue was obtained from Orissa by the Moghuls and the Mahrattas. All that can be definitely said of these settlements would appear to be that while the Moghuls made some attempt to proportion the revenue to the assets of the country, the Mahrattas wrung out of it all they could, irregularly and ruthlessly, with the result that when we first approached the question of its settlement in 1803, the Province was found much impoverished and in a state of anarchy. In paragraphs 242 to 249, Mr. Maddox details the history of the earlier settlements made by us from 1803 up to 1830, an unfortunate record of assessment on insufficient enquiry, and of the enforcement of inelastic rules for the realisation of inequitable revenues, and he shows incidentally how many an old Uriya family was ruined, and how the proprietorship of the land fell, in many cases, into the hands of Bengali speculators. Between 1805 and 1820 the revenue rose fitfully from about 11 lakhs to 13½ lakhs, with but little justification for the increase in either the spread of cultivation or the circumstances of the people. From 1820 to 1830 but little change appears to have been made in the revenue demand.

10. The foundations of the present prosperity of the Province rest on the great settlement of 1835 to 1845, preparations for which were commenced as early as 1830, and which was held to run from 1837, although the proceedings were not finally completed before 1845. In paragraphs 250 to 353 Mr. Maddox has fully described the procedure adopted at this settlement, and draws attention to the knowledge, experience and sympathy exhibited by all the officers connected with it, and by Sir Henry Ricketts and Mr. Wilkinson in particular. Taught by the sad mistakes of their predecessors, these officers toiled with marked industry and ability to master every difficulty that stood in the way of a fair assessment, and to store up and tabulate the detailed information as to the material condition and economic circumstances of the country, without which no successful settlement can be made. Their efforts were cordially supported by the authorities in Calcutta, and their reward has been the unquestionable success of the settlement, the implicit confidence of the people in the records prepared by them, and the endurance of their names as household words throughout the districts in which they laboured.

11. As regards the zamindars with whom Government made this settlement, Mr. Maddox has traced with great care and in considerable detail the origin of the proprietary rights which were then confirmed. The majority of the real zamindars who held proprietary rights under the Moghuls or Mahrattas had been recognised as Rajas of Killas, or had received permanent settlements of their lands, before the commencement of the last settlement proceedings, and the present zamindars of Orissa would appear to be descended from all the *talukdars*, rent-collectors, village headmen, holders of resumed *jagirs* and the like, who were found at the time of the British conquest, to be paying their revenue direct into the Mahratta treasuries, as well as from the holders of the larger revenue-free properties that were resumed and assessed to revenue by us during the early years of the present century. Under these zamindars again a class of subordinate proprietors, or proprietary tenure-holders, was recognised at the last settlement, composed for the chief part of village headmen, such as *muqadams*, *sarbarahkars* and *pursethis*, or the purchasers or recipients of proprietary rights in small plots of land from the zamindars or *muqadams*, such as *kharidadars* or *shikmi zamindars*.

The above formed the proprietary classes, the zamindars paying their revenue direct to the treasury, and the sub-proprietors, or proprietary tenure-holders, paying their revenue through the zamindars of the estates within which their lands lay; with them also may be included the *lakhraj bahaldars* or holders of confirmed revenue-free lands, who possess a permanent right to hold their lands free of land revenue, and are independent of the zamindars of whose estates their lands originally formed a part, except in so far as they are bound under Act IX (B. C.) of 1880 to pay certain cesses through those zamindars.

The tenantry who hold beneath the proprietors or proprietary tenure-holders mentioned above may be divided roughly into seven classes: (1) the *Tankidars*, or holders of small areas permanently assessed at a quit-rent; (2) The *Nisfi-bazyafidars*, or holders of resumed rent-free lands assessed for the term of the last settlement at half rates; (3) the *Kamil bazyafidars*, or holders of resumed rent-free lands assessed at the last settlement at full rates; (4) the *Thani* raiyats, or resident cultivators, whose rents were fixed for the term of the settlement, (5) the *Chandina* raiyats, or holders of homestead lands, whose rents were also fixed for the term of the settlement, (6) the *Pahi* raiyats, or non-resident raiyats, who were practically, in most cases, tenants-at-will, and (7) the holders of service and other *Jagirs* who held their lands rent-free, either in consideration of services to be rendered, or as rewards for services in the past. The above list is not exhaustive, but includes all but a few small classes of the tenants of the Province.

12. The statistical results of the settlement as it affected both Government, the proprietors and the various classes of the tenantry, may be briefly summarised. The temporarily-settled areas were settled with about 8,000 proprietors in 3,571 estates, and the following table shows how the area of the temporarily-settled lands was dealt with, and how revenue was assessed on the estates comprised within them—

DISTRICT.	Total area.	Cultivated area.	Assessed area.	Mufasaal jama or assets.	Sadar jama, or revenue.	
					Percentage.	Amount.
1	2	3	4	5	6	7
	Acres.	Acres.	Acres.	Rs.		Rs.
Cuttack	1,174,900	697,000	621,000	11,21,000	64	7,14,100
Balasore	943,993	554,000	493,200	5,75,600	65	3,77,290
Puri	499,100	377,000	302,400	4,41,600	66	2,92,800
Total	2,617,993	1,628,000	1,416,600	21,38,200	65	13,84,190

The above figures further show that the incidence of revenue was Rs. 1-2-5 per assessed acre in Cuttack, As. 12-3 per acre in Balasore and As. 15-6 in Puri, or As. 15-7 for the whole Province, and that the balance of the assets left to the zamindars amounted to Rs. 4,06,940 in Cuttack, Rs. 1,98,310 in Balasore, Rs. 1,48,860 in Puri and Rs. 7,51,010 in the Province as a whole. I have been unable to find any statement of the areas recorded at the last settlement as held by those proprietary tenure holders who have been treated as such at both the past and the present settlements, that is, the *muqadams sarbarahkars, pursethis* and the like; but I gather from the figures in appendices G.A, G.B., and G.C., and elsewhere in the report, that some 3,000 such tenures were settled with about 6,000 tenure-holders. The asset of these tenures and the revenue payable for them to the zamindars are shown in the following table :—

DISTRICT.	Assets.	REVENUE.		Balance.
		Percentage.	Amount.	
1	2	3	4	5
	Rs.		Rs.	Rs.
Cuttack	1,28,609	80	1,02,741	25,868
Balasore	65,114	83	54,060	11,054
Puri	2,11,617	81	1,70,856	40,761
Total	4,05,340	81	3,27,657	77,683

As a general rule, the proprietor retained 20 per cent. of the gross assets, and paid the balance to Government, *i. e.*, 60 per cent. of the gross assets. The revenue thus paid has been included in the statement of revenue assessed on the proprietors.

The *kharidadars* differ from the above in that, whereas they were treated as subordinate proprietors at the last settlement, and their rents calculated at a certain percentage of the assets they received, they have been treated in the present settlement as tenure-holders under the Bengal Tenancy Act, and their rents settled accordingly. The following table shows the area held by them and the rents assessed upon them at the last settlement. I am unable to give figures for the assets of their tenures :—

DISTRICT.		Area	Rent	Incidence per acre.		
1		2	3	4		
		Acres.	Rs.	Rs.	A.	P.
Cuttack	....	26,900	28,600	1	1	0
Balasore	....	14,800	11,200	0	12	1
Puri	....	3,700	4,000	1	1	3
Total	....	45,400	43,800	0	15	5

The revenue-free lands at the last settlement amounted to 134,442 acres, or 11.4 per cent. of the total area dealt with in Cuttack, 106,015 acres, or 11 per cent. in Balasore, and 90,635 acres, or 18.1 per cent. in Puri, giving a total of 331,093 acres, or 12.6 per cent. for the whole Province. This is a large area, but it must be remembered that Orissa is one of the holy lands of the Hindus, and supports a very large population of Brahmin priests in attendance at an infinite number of Hindu shrines.

13. The following figures show how subordinate tenancies were treated at the last settlement, and are worthy of notice, as some marked changes will be found in the figures when we come to deal with the existing statistics which have formed the basis of the present settlement operations :—

CLASS.	CUTTACK.				BALASORE.				PURI.				TOTAL.			
	Area in acres.	Percentage of assessed area.	Rent.	Incidence per acre.	Area in acres.	Percentage of assessed area.	Rent.	Incidence per acre.	Area in acres.	Percentage of assessed area.	Rent.	Incidence per acre.	Area in acres.	Percentage of assessed area.	Rent.	Incidence per acre.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			Rs.	Rs. A. P.			Rs.	Rs. A. P.			Rs.	Rs. A. P.			Rs.	Rs. A. P.
Tankidars.	500	...	100	0 3 2	...	...	...	...	23,100	9.2	13,600	0 7 9	28,600	2.0	13,700	0
Nisfi baziafti	87,200	14.0	35,200	0 6 5	70,800	15.5	24,200	0 5 1	57,300	18.9	35,200	0 9 10	221,300	15.6	94,800	0 6 10
Kamil	37,700	6.0	34,000	0 14 5	37,100	7.5	28,100	0 12 1	5,800	1.9	6,700	1 2 6	80,600	5.7	68,800	0 13
Thani	133,700	21.5	378,700	2 13 3	107,100	21.7	1,85,000	1 11 8	96,900	32.2	2,01,500	2 1 4	337,700	23.8	7,65,300	2 4
Chandina	10,100	1.6	40,300	3 15 10	15,500	3.1	30,800	1 15 9	1,300	.4	6,900	5 4 11	26,900	1.8	78,000	2 14 4
Pahi	268,900	43.3	5,13,500	1 14 3	219,100	44.4	259,300	1 2 11	82,900	27.4	1,22,900	1 7 8	570,000	40.3	8,95,700	1 9
Jagir	22,780	3.6	...	.. ..	15,280	3.0	...	.. ..	8,850	2.9	...	...	46,910	3.3	.. ..	.. ..

With reference to the above table, it may be observed that Balasore was assessed lightly, the population being scanty, the soil poor, and the lands liable to flood, and interspersed with considerable tracts of jungle. In Puri also great damage was done almost annually by floods, and the lands of many parts of the district were no better than those of Balasore. On the other hand, it was more highly assessed, the district being more closely cultivated and a larger proportion of the area being held by privileged tenants, from whom comparatively high rents were settled. Cuttack was then, as it is now, by far the most prosperous district, being less liable to flood, having a more fertile soil, and being in a more advanced stage of civilisation. It will be noticed that the rents of *pahi* raiyats, which have always been more or less competition rents in Orissa, reflect with much accuracy the general conditions obtaining in each district, the incidence of such rents standing at Re. 1-14-6 for Cuttack, Re. 1-7-8 for Puri and Re. 1-2-11 for Balasore. As will be seen from the history of the *thani* holdings during currency of the settlement, there was small justification for the settlement of their rents at rates so far above those of the *pahi* holdings, and had these lands been assessed to lower rents it is probable that a smaller proportion of them would have been abandoned.

14. The settlement thus concluded was to have run to the year 1867
 Extension of the term of the last Settlement, only, but the great Orissa famine of the years 1865-66 rendered it inadvisable to undertake re-settlement operations during the years when the former settlement was drawing to a close, and that settlement was accordingly prolonged for another thirty years. The history of the rapid recovery of the Province from the horrors of the great famine has subsequently shown that this extreme leniency was scarcely needed, and that a re-settlement might well have been made some twenty years ago, to the advantage of Government and without undue harassment of the people. The result of the excessive prolongation of the former settlement has undoubtedly been the exclusion of Government for a lengthy period from its fair share of the produce of the soil, and the retention by the landlord classes in Orissa during the same period of profits to which they had no equitable right.

15. During the sixty years of the currency of the settlement of 1837,
 Changes during the currency of the past settlement, the Province has developed in every direction in spite of the disaster of 1866, the population has increased by over 80 per cent., cultivation has extended by 30 per cent., communications have been largely improved, bringing an increase in the volume of trade, and the prices of staple food-crops have trebled, securing largely increased profits to the cultivators. This development has naturally been accompanied by an increase in the rents of the *pahi* raiyats, the only class for whom rents were not fixed for the term of the settlement, and the figures given by Mr. Maddox show that the incidence of their rents advanced from Re. 1-14-6 to Rs. 2-11-6 in Cuttack, from Re. 1-2-11 to Re. 1-11-1 in Balasore, and from Re. 1-7-8 to Re. 1-13-8 in Puri, the over-assessment of the last named district being to some extent responsible for the comparatively small enhancement there. It is a significant fact, however, as showing at what high rates the rents of *thani* raiyats were fixed at the last settlement that the general incidence of the rents of *pahi* raiyats did not even in the course of 60 years, rise to that shown by the *thani* rents fixed in 1837. This evidence would not in itself be conclusive as to the over-assessment of *thani* lands at the last settlement, as it is to some extent true that these privileged tenancies frequently included the best lands in the village, but it is borne out by the figures which show how materially the area held by *thani* raiyats, and the rents paid by them, diminished during the term of settlement, in spite of the valuable privileges conferred by the *thani* status. The following table compiled from the figures given by Mr. Maddox in paragraphs 322 and 462 of his report, will show the difference between the

areas and rents of *thani* raiyats as fixed in the settlement of 1837 and as found by us to be existing at the time of the present settlement :—

DISTRICT.	LAST SETTLEMENT, 1835 to 1845		EXISTING* 1890 to 1900.	
	Area.	Rent.	Area.	Rent.
1	2	3	4	5
	Acres.	Rs.	Acres.	Rs.
Cuttack ...	133,700	3,78,700	83,800	2,20,900
Balasore ...	107,100	1,85,000	45,900	82,100 +
Puri ...	96,900	2,01,600	66,700	1,23,600
Total ...	337,700	7,65,300	196,400	4,26,600

Among other changes which took place in the course of the settlement was the multiplication of estate and of landlords, the number of estate rising from 3,571 to 6,377, and the number of individual landlord from 8,000 to 42,400. As might have been expected, the lands in the direct possession of the landlords increased proportionately, and the following figures show the increased in these lands, and in the valuation made of them in the sixty years :—

DISTRICT.	LAST SETTLEMENT.		EXISTING.	
	Area	Valuation.	Area.	Valuation.
1	2	3	4	5
	Acres.	Rs.	Acres.	Rs.
Cuttack ...	42,300	75,400	85,800	2,23,200
Balasore ...	20,400	25,100	46,600	81,100
Puri ...	26,000	46,800	40,100	80,200
Total ...	88,700	1,47,300	172,500	3,84,500

This very marked increase in the area and value of the lands held by the proprietors was by no means the only benefit derived by them during the course of the settlement, as may be inferred from the account which has been given above of the rise in the incidence of *pahi* rents. In order to show clearly to how considerable an extent the landlords were able to absorb the increasing profits of cultivation during the term of the settlement, I submit the following table, compiled in the main from Mr. Maddox's Appendices A-A to C-N and G- A. to G- C., showing the financial position of the proprietors and proprietary tenure

* NOTE :—*Thani* areas and rents included in *thani pahi* holdings have been amalgamated with the figures in columns 4 and 5.

See Appendix U to Mr. Kingsford's Report on Balasore,

holders at the commencement of the last settlement and at the time that the present re-settlement operations were initiated :—

	INCOME AT COMMENCEMENT OF LAST SETTLEMENT <i>VIDE</i> FIGURES IN PARAGRAPH 12 <i>SUPRA</i>		INCOME EXISTING BEFORE PRESENT RE-SETTLEMENT.			
	Amount	Percentage of assets,	Assets.	Revenue	Balance	Percentage of existing assets actually retained.
1	2	3	4	5	6	7
<i>Proprietors.</i>	Rs.	Rs.	Rs.	Rs.	Rs.	
Cuttack ...	4,06,900	36	18,47,400	7,14,100	11,33,300	61
Balasore ...	1,98,310	35	9,88,800	3,77,290	6,11,510	62
Puri ...	1,48,800	34	5,73,700	2,92,800	2,80,900	49
Total ...	7,54,010	35	34,09,900	13,84,190	20,25,710	59
<i>Proprietary tenure-holders.</i>						
Cuttack ...	25,868	20	2,04,434	1,02,741	1,01,693	49
Balasore ...	11,054	17	1,03,732	54,060	49,672	48
Puri ...	40,761	19	2,67,188	1,70,856	96,332	36
Total ...	77,683	19	5,75,354	3,27,657	2,47,697	43

There was no great change in the areas held revenue and rent free between the settlements, nor in the areas and rents of the other privileged tenants, with the exception of the *kamil bazyafidars*, whose lands decreased, their privileges being less valuable than those of the *nisfi bazyafidars*, and consequently less carefully maintained.

16. I have thought it advisable to deal at some length with the figures of the settlement of 1837, and the changes that occurred during the sixty years that had elapsed since it was made, in order that task that lay before the officers who conducted the recent settlement might be made the more clear, and that the results that will be shown to have accrued from the present proceedings might be the more easily intelligible. I will now summarise briefly the proceedings undertaken for the re-settlement of the temporarily-settled lands of the Province, and the circumstances in which those results were attained.

17. The only portions of the area to be dealt with that had been professionally surveyed previous to the commencement of the recent settlement operations were an area of 364 square miles of irrigated and irrigable lands in the district of Cuttack, and an area of 105 square miles, comprised in the *ekhrajat mahals*, or temple lands, in the district of Puri. In these areas a cadastral survey on the scale of 32" to the mile had been carried out in the years from 1876 to 1879, and the maps then prepared were utilised in the present operations, being revised in the course of them so as to bring them up to date. With the exception of these areas and certain permanently settled areas that had been previously dealt with, and were consequently excluded from the scope of the operations, the whole of the districts of Cuttack, Balasore and Puri were traversed, the permanently-settled areas being subsequently topographically surveyed on the scale of 2" to the mile and the remaining temporarily-settled areas, with a few isolated permanently-settled estates taken up with them for special reason,

being cadastrally surveyed on the scale of 16" to the mile. The actual area covered by the traverse survey appears to have been 5,513 square miles, while 4,797 square miles were cadastrally surveyed, 1,013 square miles were dealt with by the topographical party, and the maps for an area of 469 square miles previously surveyed were revised. Owing to the absence of any completion report of the work done by the Survey of India in Orissa during the recent operations, it is difficult to obtain accurate figures for either the extent or the cost of their work, and those that have been supplied by Mr. Maddox have been compiled by him from annual reports and other similar sources of information.

18. The traverse survey operations were commenced by a single party under Mr. Paterson in the field season of 1889-90, two parties were employed in the field seasons from 1890 to 1893, and a single party completed the work by September 30th, 1894. There were some difficulties encountered in connection with the determination of the unit of survey, but ultimately the existing village, as pointed out by the villagers, was adopted, and has subsequently proved the most reasonable basis for our work, as well as the one most acceptable to all parties. There was little obstruction on the part of raiyats or zamindars, and the work was done efficiently and inexpensively, the cost averaging Rs. 39 per square mile.

19. The cadastral survey was carried out, as noted above, on the scale of 16" to the mile, the only exceptions made being in the case of large towns, which were surveyed on the 32" or 64" scales, and where it was not found possible to show all the details of village sites on the 16" maps. In such cases these sites were separately surveyed on the 32" or 64" scale, and entered on the margin of the village maps. The work was mainly performed by trained up-country amins from the North-West Provinces; the attempt to utilise the services of local *patwaris* and other Uriyas proving a failure, owing to the very slow progress achieved by them and the consequent increase in the cost of coolie labour. The rate paid to these amins was Rs. 3 per 100 acres, and the cost of coolies averaged 9 pies per acre. The rules under which the cadastral work was done have not been reproduced by Mr. Maddox. In fact, they varied somewhat in details from season to season, though following generally the instructions contained in the Board's Survey Manual.

The following figures of progress are taken from Mr. Maddox's statement in paragraph 413 of his report :—

Survey year		Number of Survey Parties.	Area dealt with. Square mile.
1889-90	....	1	358
1890-91	....	2	695
1891-92	....	3	1,196
1892-93	....	3	1,569
1893-94	....	1	649
1894-95	....	1	5
			Total.... 4,672

The above does not include the revision area of 469 square miles, which was dealt with in the years 1892-93 and 1893-94 by small detachments from the main survey parties.

The total cost of these operations amounted to Rs. 4,40,786, the cost rate averaging nearly Rs. 100 per square mile for cadastral survey and Rs. 53 for the revision area.

20. In addition to the work of cadastral survey, the amins of the Survey of India Department were also entrusted with the work of writing up the settlement records for each village on the field (or *khanapuri*), being controlled and supervised at this stage both by their own officers and by officers of the settlement Department deputed for the purpose. The records thus prepared were four in number, (1) the *khewat*, in which were entered the names, *tauzi* number, areas and proprietors of each estate of which any lands were situated in the village; (2) the *hasra*, or field index to the map, containing one entry for

Record-writing.
Early stages.

each field or separate plot belong to one cultivator, specifying the names of the owner and the occupier, its area, the crop borne on it and a description of the nature of the soil; (3) the *khatian*, or abstract record, containing a list of the tenants of the village, with details of the lands held by each, the rent payable for them, and the class of tenancy to which the holding belonged; and (4) an abbreviated *khatian* known as the *parcha*, which was prepared simultaneously with the *khatian* and handed over to the tenant, to enable him to understand what was being entered in the record, and to check its accuracy. The difficult work of filling up these forms was greatly complicated in Orissa in the early stages of the proceedings by the fact that it was entered upon without sufficient preliminary enquiry, and before adequate preparations had been made for it by the determination of suitable forms, the compilation of instructions for record writing, and the training of amins for the work. The consequence was that the *khanapuri* was done during the first two seasons by untrained men, who were frequently insufficiently acquainted with the language of the country and who had to work on unsuitable forms and with inadequate instructions as to how to deal with them, and it was until well on into the field season of 1891-92 that the officers appointed to supervise the work had hammered out rough rules for the guidance of their subordinates, and until the Autumn of 1892 that these rules were consolidated, approved by the responsible authorities and prescribed for general use. Thus for two seasons, during which the record-writing was completed for an area of over 1,000 square miles, there were practically no rules for its conduct, while in the season of 1891-92, during which nearly 1,500 square miles were dealt with, the various survey parties were dependent on local rules, hurriedly drawn up by the supervising officers, and in many cases not wholly suitable. At the same time the forms in which the records were to be prepared were constantly being changed, and the Uriya amins, to whom the work of *khanapuri* was eventually entrusted, proved indolent and difficult to teach. In these circumstances it is not to be wondered that the Survey Department complained of the difficulties of the work, or that the energetic and capable supervision exercised by Colonel Sandeman and his assistant, Lieutenant (now Captain) Crichton, was insufficient at once to secure efficient work and accurate record-writing. I was myself one of the Assistant Settlement Officers deputed to supervise *khanapuri* during 1891-92, and can speak with experience of the difficulties of the work and of the impossibility of excepting good records in the circumstances that then obtained.

21. A marked change came over the conduct of the proceedings, however, in the year 1892, when the *khanapuri* rules referred to above were brought into general use, when Mr. Maude was appointed Settlement Officer, and when the admirable system of co-operation and joint control evolved by Colonel Sandeman took the place of the confusion that had reigned in the previous seasons. The rules, as revised during the season 1891-92, were finally printed in March, 1893, and are substantially the same as those which were followed up to the end of the work, and which are reproduced as Appendix B-2 of Mr. Maddox's report. From this time forward the work of the amins steadily improved, and the quality of the records prepared in the district of Balasore, which was taken up last, is in marked contrast to the quality of those in Puri and in those tracts in Cuttack which had been dealt with in the years from 1889 to 1892. It is unnecessary here to repeat the figures showing the progress of the work, as they approximate closely to the figures given above, in paragraph 19 for the progress of cadastral survey. The figures for the cost of this stage of the work given by Mr. Maddox in paragraphs 414 and 415 of his report, and again in paragraph 623, are somewhat inconsistent, owing to the want of sufficient information, but I gather from the figures shown in paragraph 415 that while the indifferent *khanapuri* of the earlier years was done at a somewhat lower rate, the more accurate records prepared in the later years cost from Rs. 50 to Rs. 60 per square mile.

22. The various important questions that were dealt with at this stage of the work are enumerated and fully dealt with in paragraphs 397 to 411 of the report. The action taken to collect statements of tenancies with their areas and rents from the landlords, previous to *khanapuri* was a mistake which occasioned some

Important question dealt with at the record-writing stage.

misrepresentation of facts and a good deal of corruption, while the attempt made to collect *parchas* from the raiyats, with a view to their completion in office, and their subsequent redistribution, was soon abandoned on account of the evils to which it gave rise. While the employment of some of the Collectorate *kanungos* on settlement work was a partial success, the attempt to utilise the services of *patwaris* as *amins* ended in complete failure. There is always some difficulty found in all districts in Bengal in persuading the subordinate police officers that it is their duty not only to countenance but to assist the Settlement Department, and they began in Orissa, as elsewhere, by forbidding the *chaukidars* to render us any assistance. This difficulty was soon overcome by an appeal to the higher police authorities, and the *chaukidars* were found willing enough, as soon as the prohibition was removed, to give such help as was required of them. Mr. Maddox has given, in his paragraph 410, a full account of the discussions on the question as to what area was to constitute the unit of survey, but I do not find any statistics as to the number of disputes concerning village boundaries that were decided in the course of the work. It is probable that the confusion that obtained in the earlier years of the work rendered the compilation of accurate figures for these cases impossible. I may mention here that Mr. W. C. Macpherson, as Director of the Department of Land Records and Agriculture, was closely associated with Mr. Maude in the determination of the various questions dealt with at this stage.

23. After the records had been prepared in the field by the Survey Department, they were compared with one another and checked in the office of each camp, areas were entered in them, and they were abstracted in certain tabular statements. The papers were then all handed over to the Settlement Department, in order that rents and status might be entered after due enquiry by a responsible Revenue Officer, preliminary disputes decided and the records published in draft in accordance with the provisions of the Bengal Tenancy Act. Mr. Maddox points out in paragraph 417 of his report how many difficulties be set this stage of the work in Orissa, due to the same causes that had rendered the *khanapuri* of the earlier stages of the work so inefficient.

The work of attestation was further complicated by want of experience, and by divided councils as to how this work should be done, as to the manner in which the *khaticns*, which form the units of the record-of-rights in each village, should be prepared, and as to the amount of comparison with the records of the last settlement that was necessary for the proper verification of the record. For the first three years during which the work proceeded, also, there was much doubt as to how far the *muharrirs* conducting the clerical part of the work required supervision, and as to the powers to be entrusted to them in the matter of entry of disputes, correction of mistakes and the like.

In consequence of these difficulties, this work, which was begun in the season of 1890-91 was very inefficiently carried out during that and the two subsequent seasons, in spite of some valuable pronouncements by Mr. Finucane, Director of Land Records and Agriculture, as to the principles which should guide this stage of the work, and it was not until Mr. Maude had had time to deal thoroughly with the question, after his appointment at the close of 1892, that any wholly satisfactory attestation work was done. The rules that were drawn up by Mr. Maude in 1893 were based on the various sets of rules which had been prescribed in different circles by different Assistant Settlement Officers during the previous season. They were comprehensive and complete, and although there was a good deal of further discussion in 1894 concerning important points, the right decision of which was essential to good attestation, the main principles and the great mass of the details of Mr. Maude's rules were adhered to, and appeared in the rules as finally revised, and as now reprinted in Appendix B to the report. It may also be noted here that the amendment of the rules under the Bengal Tenancy Act, which was made in 1894, mainly at the instance of Mr. W. C. Macpherson, Director of Land Records & Agriculture, contributed in no small degree to the simplification and proper organisation of the work of attestation. Unfortunately, by the time that proper rules had been introduced for the regulation of this work, a very large proportion of the records in Puri and Cuttack had already

been dealt with, and it was subsequently found that they had been attested under such inconsistent rules, and with such varying degrees of care and supervision, that they had all to be reattested in the years 1895 to 1898.

24. In paragraph 423 of his report Mr. Maddox has summarised the chief principles of attestation work which were determined by Mr. Maude in his rules of 1893, and in the following paragraphs he enumerates some of the more important matters which were either dealt with finally in those rules, or subsequently determined in the course of the conferences and discussions of 1894. The final decisions come to in respect of the chief of these points may be thus briefly summarised.

(1) Attestation work was to be conducted either in each village or within three miles of it.

(2) The Revenue officer was to be present throughout the proceedings, supervising the work of the muharrirs, dealing with objections and disputes, and finally interrogating each individual tenant as to the accuracy of the entries made in the records concerning his lands, his rent and his status.

(3) The unit of the record was to be a *khatian*, containing all the lands held by one tenant on the same conditions in each village, lands held by one individual on differing conditions being entered in separate *Khatians*. Thus revenue-free, *jagir*, *thani* and *pahi* lands were all to be entered in separate *Khatians*.

(4) The muharrirs were to have nothing to do with the determination of disputes, which was to remain in the hands of the Revenue officer alone.

From May, 1892, almost to the end of the re-attestation proceedings, Mr. Macpherson, as Director of Land Records & Agriculture, took a prominent part in all the discussions and correspondence which led to the determination of the above principles and to the removal of the difficulties which were encountered.

25. The progress made in attestation is referred to in paragraphs 424 and 436 of the report, and need not be reproduced here. In the earlier days of the work many officers, in ignorance of the nature of the duties they had to perform, returned extravagant figures as representing their monthly outturn, and on the other hand, when the reaction set in, and the responsible character and the difficulties of the work were more fully appreciated, a tendency to over refinement reduced the rate of progress too low. Eventually, when experience had led to the amendment of the rules and to the proper organization of the attestation camps, it was found that an Assistant Settlement Officer could attest about 20,000 plots in a month, and I think that this was a reasonable average rate of progress for the work, looking to the special circumstances that surrounded the operations in Orissa. The expenditure incurred upon attestation was very heavy, as might be expected from the above account of the proceedings. In paragraph 625 of his report, Mr. Maddox estimates that it amounted to Rs. 4,80,000 in Cuttack, Rs. 1,80,000 in Balasore, and Rs. 2,05,000 in Puri, or Rs. 8,65,000 in all. In Cuttack, the total is swelled by the inclusion of the whole cost of the pay and establishment of the Settlement Officer, and the disproportionate cost in Puri is due to the fact that almost the whole of the work in that district had to be done twice over. The above figures give cost rates of Rs. 233 per square mile for Cuttack, Rs. 105 for Balasore, Rs. 200 for Puri, and Rs. 183 for the Province as a whole.

26. I now come to the important question of the settlement of rents, the Stage in the proceedings which followed next after the attestation of the records, and was preliminary to the final one, that of the assessment of the revenue. From the circumstances of the case it was obvious that the rents of a very large number of privileged tenants, which had remained untouched for sixty years, must be enhanced at the present settlement, while it was known that cultivation had largely extended during the same period, and that there were considerable areas in the possession of both landlords and tenants that had never been assessed to revenue or rent. At the time of the initiation of the proceedings very little appears to have been said on the subject, and the first pronouncement that is quoted by Mr. Maddox is

that contained in a note written by Mr. Finucane in February, 1891. This note foreshadows so accurately the lines upon which rents were actually settled five years later throughout the area under settlement, that I need make no apology for quoting it also here. Mr. Finucane wrote :—

“It will probably be found that the rents of *pahi* raiyats are as high as the land can afford to bear, and that they may be left undisturbed.

“The rents of *thani* raiyats, which, under the terms of the last settlement, ought to have remained unaltered for the past sixty years, will as a matter of course, have to be now enhanced, if they have not in fact been enhanced during the currency of the existing settlement.

“It is not easy to lay down *a priori* the principles on which such enhancements should be made. The full enhancement that may be demandable on the ground of rise in prices cannot, it is probable, be taken, because the rent fixed for *thani* raiyats at the last settlement were higher than the competition rents demanded from *pahi* raiyats.

“Neither can the rents of *thani* raiyats be fixed on the principle of raising them to those now paid by *pahi* raiyats. A middle course will have to be followed. The question is one regarding which the Settlement Officer should ascertain facts and ask for orders, before finally adopting any principle of assessment.”

The above were, broadly speaking, the principles upon which rents were ultimately settled in Orissa for the important classes of tenants mentioned, although before they were finally adopted many experiments were made with the object of utilising the “prevailing rate” section of the Bengal Tenancy Act, in order to level up inadequate rents and to secure uniformity in the rents to be settled during our proceedings.

27. It is unnecessary to review at any length the immense amount of valuable work done in Orissa by Messrs, Maude, Nathan, Walsh and Taylor, under the guidance of Mr. Macpherson as Director of Land Records and Agriculture, during the years from 1892 to 1895, while working out rules for the settlement of rents, and investigating the various problems that accompanied the determination of the best method of dealing with *baziaftidars* and *kharidadars*, with lands held by proprietors, with *jagirs* and other lands held from proprietors rent free or on quit-rents, and with the *jagirs* of *chaukidars*, village servants, *khandaits* and *paiks* or while devising methods by which rents could be settled expeditiously and inexpensively, and yet in accordance with the provisions of the Bengal Tenancy Act. The real position held by the various classes of tenants in Orissa was determined during this period, and the difficulties inherent in the procedure prescribed by the Bengal Tenancy Act for the settlement of rents were to some extent met by the publication of revised rules under that Act in 1894, while at the same time evidence was accumulated as to the rise in prices since the rents of privileged tenants had been settled at the last settlement, and the law under which it was held by the legal advisers of Government that no rents could be settled before the expiration of the old settlement was amended by the passing of Act V of 1894. While these and many other important matters were dealt with, however, no practicable scheme for the settlement of rents was devised, and at the close of the year 1895 it seemed as if nothing satisfactory could be done without some radical alteration of the law. The reason for this appears to be that during the whole of the earlier enquiries and experiments made with a view to the settlement of rents, the simpler plan advocated by Mr. Finucane was set aside in favour of the settlement of a rent for each field by means of a rate or a crop-map (erroneously called a soil map). A great deal of valuable time was spent in efforts to divide villages up into homogeneous blocks, each of which could be said to contain lands assessed to rent at the same rates, or which could be assessed by the Assistant Settlement Officer, in virtue of his knowledge of rates and rents generally, at some one rate which would be fair and equitable. The first and the most prominent result of these proceedings was the able report prepared by Mr. Nathan on the subject of the assessment of the Kotdes pargana in Puri, which was written by him in close communication with Mr. Maude, and submitted in July 1893. This report contained, besides a very large amount of valuable information, and many sound suggestions as to the status of various classes of tenants and the treatment to be accorded to particular classes of lands, an elaborate scheme for the settlement of rents within the pargana by means of these rate or crop maps, from which the prevailing rates payable in a village for lands growing certain crops were to be

ascertained, and, after check with certain guiding rates obtained from a comparison of similar rates in neighbouring villages, were to form the basis for the enhancement of all inadequate rents in that village. A criticism of this report was written by Mr. Finucane in December, 1893, (reproduced in the appendices to Mr. Maddox's report) in which it was shown that the cost of the settlement of rents under this scheme would be prohibitive, and that the procedure advocated was of doubtful legality. In my opinion the adoption of this scheme would, in all probability, have occasioned a far larger expenditure than was anticipated at the time, and the proposals appear to me to suffer from the fatal defects that they relied far too much upon information to be supplied by landlords and their agents, that they were too complicated to be understood by or to meet with the acceptance of, the people, and that they lent themselves to indifferent work in the hands of any less capable and conscientious officers than their authors. As an alternative to Mr. Nathan's plan, Mr. Finucane suggested a procedure based upon the principles enunciated in the note from which I have quoted in paragraph 26 above, but at the same time advised, with a view to the legal difficulty subsequently removed by Act V of 1894, that the duties of the settlement staff should be confined during the following two years to attestation and recording of status and existing rents. Seeing that the legal disability was almost immediately removed by legislation, it seems to me unfortunate that this advice was followed, and had the question of rent settlement been dealt with more completely in 1894 and the early part of 1895. I think that some delay in the realisation of the new revenue of the Province might have been avoided. Mr. Finucane's note was only partially approved by the Lieutenant-Governor (Sir Charles Elliott), who expressed his opinion at the same time that the lands of the Province should be assessed to rent with some reference to their agricultural value, and that soil rates were necessary to any such assessment. It was in accordance with these views that Mr. Taylor's subsequent experiment was made in the Bakhrabad pargana of Cuttack.

28. In September 1895 Mr. Maddox, then Settlement Officer of Balasore, after various experiments with soil maps, and after the consideration of several elaborate rate reports that had been prepared by his Assistants, commenced to settle rents on the system suggested in Mr. Finucane's note of 1893, and in January 1896 he submitted for the approval of the Director and the Board a set of rules for the settlement of rents based on his proceedings of the previous months. While these rules carried out the orders which had already been passed as to the treatment to be accorded to particular classes of tenants, and in the matter of certain classes of land, they differed materially from all previous rules in their reversion to a simpler plan of settlement, and in their rejection of the whole system of rate maps, and crop or soil rates, and of the assessment of rents by the application of ascertained rates to the areas of the different classes of land contained in each tenancy. These rules were forwarded to Government by Mr. Macpherson in February 1896, with a letter which indicated that he was of opinion that no satisfactory system for the settlement of rents could be devised in the existing state of the law, and which was closely followed by a letter in which he proposed the withdrawal of the Province of Orissa from the operation of sections 104 to 108 of the Bengal Tenancy Act, and the settlement of rents under the provisions of Act VIII (B. C.) of 1879, to be re-enacted with amendments for the purpose. Mr. Macpherson left during the same month on nine months' furlough, during which period I officiated for him, while Mr. Maude also left on furlough and did not return to his appointment of Settlement Officer of Cuttack and Puri, Mr. Maddox succeeding him as Settlement Officer of the Province of Orissa with three other members of the Imperial Civil Service in subordinate charge of the three districts under Settlement.

29. As soon as Mr. Maddox's rules had been submitted to the Board, he was summoned to Calcutta to discuss them with the Director, and a conference was held by the Lieutenant Governor (Sir Alexander Mackenzie) at Belvedere to consider settlement matters in general, and the settlement of Orissa in particular. At this conference it was arranged that Mr. Maddox should bring his system of settlement of rents into force generally in all three districts, and that the senior member of the Ecard, Mr. (now Sir) C. C. Stevens, accompanied by the Director, should visit Orissa at an early date, to inspect the work in the field and determine the

Development of the rules for
settlement of rents.

rules under which the settlement of rents should proceed. This visit was paid in March 1896, the rules drafted by Mr. Maddox were thoroughly examined and largely amended on the spot, after inspection of the work then in progress in all three districts, and the revised rules were submitted by the Board for the approval of Government in May of the same year. It is unnecessary to enter here into the lengthy correspondence that ensued with the Government of India, or to go into the details of the various modifications that were made in the rules as the work progressed. It will be sufficient to note that in January 1897 the Lieutenant Governor paid a visit to Orissa, and dealt with all pending subjects connected with the settlement in a conference held at Cuttack, on the 25th and 26th of that month, and that alterations were then made in the rules to ensure that unduly low rents should not escape enhancement. This had already been provided for in a rule that dealt with collusive or beneficiary rents, but the amendment caused special attention to be drawn to the subject and undoubtedly did good, although it did not materially affect the amount by which the rents of raiyats were ultimately enhanced. The rules, as finally approved, have been reproduced as Appendix C attached to the final report. Under them the rents of the whole body of tenants in Orissa were successfully settled during the years 1896 to 1899, the basis of the proceedings being the proposal of a fair rent by the Settlement Officer, whether the existing or an enhanced rent, for the acceptance of the tenant, the immediate settlement of that rent if accepted by him, and the formal settlement of a fair rent under the provisions of the Bengal Tenancy Act in all cases in which the tenant proved unwilling to accept.

30. I will now proceed to explain how the more important classes of tenants were dealt with under these rules, and for the sake of simplicity, I will take in order the same classes, including the *jamabandi kharidadars* and revenue and rent-free holders, that I have referred to in paragraphs 12 and 13 above.

Revenue and rent-free holders holding on confirmed titles were of course left in possession of their lands free of rent, but all lands found in their possession in excess of those thus granted to them were assessed to rent and settled with them as raiyati holdings, after an allowance of 10 per cent. had been made to cover any excess due to the greater strictness of our system of measurement, and with the proviso that small excess areas up to one quarter of an acre were not ordinarily to be assessed to additional rent. Correct figures are not available to show the excess area, or *taufir*, thus assessed to rent, but it is estimated by Mr. Maddox at 2,728 acres, now held at a rental of Rs. 6,500.

Jamabandi kharidadars were treated as tenure-holders under the Bengal Tenancy Act, and rents settled for them by deducting from the gross assets of each tenure a percentage equal to the percentage granted to them at the last settlement. The maximum limit of enhancement was fixed at 200 per cent, or two-thirds of the full assessment of the cultivated area, whichever gave the lower figure. The following are the results of this assessment :—

DISTRICT,	Number of holdings.	Area.	Existing rent.	Settled rent.	Enhancement (per cent).	Incidence of settled rent per acre,
1	2	3	4	5	6	7
		Acres.	Rs.	Rs.		Rs. A. P.
Cuttack	22,600	30,100	28,000	45,300	62	1 8 0
Balasore	3,380	14,900	10,700	16,900	58	1 2 2
Puri	1,000	2,400	2,700	3,600	33	1 8 0
Total	26,980	47,400	41,400	65,800	59	1 6 2

The new rents were fixed for the term of Settlement.

Tankidars.—The rents of these privileged tenants were not disturbed, but excess areas held by them were treated in the same way as those found in the possession of revenue and rent-free holders. I can find no figures to show what area was thus treated or how much rent was assessed upon it. Both figures are probably very small.

Nisfi baziافتidars and kamil baziافتidars—Mr. Maddox gives a full account of the treatment accorded to these tenants in paragraph 42⁰ of his report. They were dealt with as raiyats whose special privilege had expired with the last settlement, but in consideration of the very low rents at which they were found to be holding, and to prevent the hardship that would have been caused by too sudden an enhancement of those rents, a strict limit was imposed on that enhancement, and they were eventually assessed to rents much below those paid by *thani* or *pahi* raiyats. The following table shows the results of the settlement of rents for these tenancies :—

DISTRICT.	Number of holdings.	Area.	Existing rent.	Settled rent.	Enhancement (per cent).	Incidence of settled rent per acre.		
1	2	3	4	5	6	7		
<i>Nisfi Baziافتi</i>		Acres.	Rs.	Rs.		Rs.	A.	P.
Cuttack	98,800	94,800	35,700	1,03,200	189	1	1	5
Balasore	48,300	78,200	22,900	68,000	197	0	13	11
Puri	36,400	59,400	33,100	67,300	103	1	1	1
Total	183,500	232,400	91,700	2,38,500	160	1	0	5
<i>Kamil Baziافتi</i>								
Cuttack	28,600	22,500	19,400	30,000	55	1	5	4
Balasore	15,700	25,200	14,800	23,300	57	0	14	10
Puri	5,400	6,500	6,100	8,200	34	1	4	2
Total	49,700	54,200	40,300	61,500	53	1	2	2
GRAND TOTAL	233,200	286,600	132,000	3,00,000	127	1	0	9

These rents were all settled for the term of the settlement.

Thani raiyats.—Under this head the settlement staff had to deal both with whole *thani* holdings that had descended entire from the last settlement, and also with the *thani pahi* or mixed holdings, in which the *thani* lands were not easily to be distinguished from the *pahi*. For the purposes of paragraph 15 above the area and existing rents of the *thani* lands included in the mixed holdings have been adjusted, but it is not possible to separate all the figures for rents and incidence. The *thani* holdings having been held at the same rents since the date of the last settlement, they were enhanced generally wherever they were found to be lower than the *pahi* rents, which as being competition rents, were accepted as the standard of the limit to which rents should ordinarily be enhanced. Owing to the over-assessment of *thani* lands which had been made in several tracts at the last

settlement, it was frequently found that competition rents had not risen above them during the currency of the settlement. In these tracts no general enhancement was made, but excess area was every-where assessed to rent at the village rate, after making an allowance of 10 per cent. for strictness of measurement the whole area being dealt with as *thani*. All *thani* rents were settled for the term of the settlement.

The result of the working of these rules is shown below :—

DISTRICT.	Number of holdings.	Area.	Existing rent.	Settled rent.	Enhancement (Per cent).	Incidence of settled rent per acre.
1	2	3	4	5	6	7
<i>Thani.</i>		Acres.	Rs.	Rs.		Rs. A. P.
Cuttack	25,800	41,700	1,14,000	1,20,900	6	2 14 5
Balasore	6,700	11,700	19,800	21,700	9.6	1 13 8
Puri	22,400	35,200	64,600	68,800	6.5	1 15 3
Total	54,900	88,600	1,98,400	2,11,400	6.5	2 6 2
<i>Thani Pahi.</i>						
Cuttack	20,200	84,200	2,13,800	2,25,300	5.4	2 10 10
Balasore	24,500	111,800	1,79,100	1,91,600	6.9	1 11 5
Puri	16,200	63,000	1,18,000	1,22,800	4	1 15 2
Total	60,900	259,000	5,10,900	5,39,700	5.7	2 1 4
GRAND TOTAL	115,800	347,600	7,09,300	7,51,100	5.9	2 2 6

Chandina tenancies :—No general enhancement was made of the rents of these tenancies, either in villages or towns but, excess areas were assessed to rents at special rates. The result was a nominal enhancement, and at the conclusion of the settlement the assessment of these holdings for the whole Province stood thus :—

Number of holdings.	Area.	Rent.	Incidence per acre.
	Acres.	Rs.	Rs. A. P.
41,800	9,100	41,700	4 9 4

These rents were also settled for the term of the settlement.

Pahi raiyats :—These include all the tenants classed under the Bengal Tenancy Act as settled, occupancy or non-occupancy raiyats, the holdings of *thani* raiyats and all mixed (*thani-pahi*) holdings being excluded. The rents of these raiyats were considerably enhanced by the zamindars during the currency of the last settlement, and have been held throughout our proceedings to be competition rents, and consequently not liable to any general enhancement. They have, however, been enhanced on the ground of excess area, or where any particular rents were found to be unreasonably low, either through collusion or fraud, or because they were specially granted as beneficial rents by the zamindar.

The working of the rules for the treatment of these rents produced the following results; I include non-occupancy raiyats :—

DISTRICT.	Number of holdings.	Area.	Existing rent.	Settled rent.	Percentage of enhancement.	Incidence of settled rent per acre.
1	2	3	4	5	6	7
		Acres.	Rs.	Rs.		Rs. A. P.
Cuttack	374,800	427,300	11,58,100	12,16,600	5	2 13 7
Balasore	231,200	370,300	6,18,400	6,81,300	10.1	1 13 5
Puri	94,600	130,200	2,40,200	2,54,800	6.1	1 15 4
Total	700,600	927,800	20,16,700	21,52,700	6.7	2 5 1

The greater enhancement in Balasore is due to the larger quantity of excess area found in that district.

These rents were settled under the Bengal Tenancy Act for fifteen years in the case of settled and occupancy raiyats, and for five years in the case of non-occupancy raiyats.

Jagirs and minha lands.—Mr. Maddox has dealt fully with the various subdivisions of these lands in paragraphs 466 to 473 of the report and I need not reproduce his account of them here. It will be sufficient to note that home steads and other lands confirmed as tenable without payment of rent at the last settlement were left unassessed; that rent-free grants made by the zamindars during the currency of the settlement were assessed to revenue but not to rent, and that the *jagirs* of village servants were regranted to them, while those of *chaukidars*, *patwaris*, *khandaits* and *paiks* were resumed and assessed to rent.

The existing rents of *under-raiyats* of all kinds were settled as fair rents, unless the landlord applied for an enhancement, in which case his application was dealt with under the law. Very few such applications were received.

Produce rents were not disturbed, unless either the landlords or the tenants applied for their commutation under section 40 of the Bengal Tenancy Act. It was only in a very limited number of cases that the Settlement staff were called upon to take action under this section.

Lands held in *khas* possession by the proprietors were assessed to revenue at their letting value, and the amount thus assessed was included in the assets of the estate. The area and the valuation of these lands have been shown in paragraph 15 above.

31. The aggregate effect of the working of the rules that have been briefly described in the two last preceding paragraphs may be summarised in the following statement showing the enhancement of the assets effected by the Settlement staff in the course of the proceedings. Further figures will be given in a later paragraph, in which

General results of the settlement of rents.

the general results of the Settlement operations will be summarised, to show how these assets compare with those ascertained and recorded at the last settlement :—

DISTRICT.	Number of holdings.	Area.	Existing assets.	Settled assets.	Percentage of enhancement.	Incidence of settled assets per acre,
1	2	3	4	5	6	7
		Acres.	Rs.	Rs.		Rs. A. P.
Cuttack	650,600	822,500	18,47,400	20,72,900	12	2 8 3
Balasore	370,290	692,200	9,88,800	11,51,400	16	1 10 7
Puri	204,400	373,300	5,73,700	6,43,300	12	1 11 7
Total	1,225,290	1,888,000	34,09,900	38,67,600	13	2 1 0

Of the total number of rents settled, Mr. Maddox estimates that in 54 per cent, the existing rents were retained; in 13 per cent. an enhancement was made on the ground of excess area; in 24 per cent. an enhancement was made on other grounds; while 3 per cent were reduced for loss of area and 6 per cent. were tenancies newly assessed.

I believe that the assets of the area dealt with during our proceedings have been adequately enhanced, with a due regard both to the rights of Government and the prosperity of the people. It is a noticeable fact that the zamindars, who would have benefited largely by a general enhancement of rents, have throughout deprecated any such proceeding, on the ground that they would find much difficulty in realising rents thus raised, and at the same time the general incidence of the assets does not compare unfavourably with that in neighbouring permanently settled tracts and in adjoining district. It may be that the opening of the East Coast Railway will greatly increase the prosperity of the Province and enhance the value of these lands, but for the present I see no reason to suppose that the rents that have been settled for them are other than fair and equitable.

32. I am unable to find in the report any statement of the annual progress made in the settlement of rents, but I gather from the annual reports of the years 1895 to 1899 that the following represents roughly the progress in each of those years :—

Survey year (from October 1st to September 30th).	Number of holdings for which rents were settled.
1894-95	13,950
1895-96	163,238
1896-97	858,040
1897-98	430,446
1898-99	45,760

It was undoubtedly owing in great part to the docility of the people, and the readiness with which they accepted the rents proposed to them, that the above progress was attained. Had any considerable numbers of them refused to attend, or declined to accept the proposals made, and had the strict provisions of the unamended Tenancy Act thus compelled us to settle a large proportion of the rents with all the formalities of the Civil Procedure Code, there can be little doubt that we should have experienced all the difficulties foreseen by Messrs. Macpherson, Maude, and Nathan, and should have found the task set before us an almost impossible one. The proceedings were not on the whole expensive, and in paragraph 625 of his report Mr. Maddox estimates that the settlement of rents cost Rs. 1,86,000 in Cuttack, Rs. 1,01,000 in Balasore, and Rs. 58,000 in Puri, or Rs. 3,45,000 in all, giving a rate of Rs. 71-9 per square mile, or As. 1-10 per acre.

33. The correspondence that led to the final orders of the Secretary of State on the subject of the percentage of the assets that was to be taken as revenue by Government, and the term for which the settlement was to be made with the zamindars, will be found in appendix A to the report, and it is sufficient to state here that the Secretary of State approved the proposal made by the Government of Bengal, and supported by the Government of India, that from 50 to 55 per cent. of the assets should be taken as revenue, adding at the same time a warning that the limit of 55 per cent. should be very sparingly exceeded. In the matter of the term of the settlement, the Secretary of State differed from both Governments in their recommendation of a 20-year settlement, and directed that the new settlement should be concluded for a term of thirty years. Mr. Maddox prefaces his Chapter on the subject of the work of Assessment to Revenue with a note to the effect that this task comprised the settlement of the revenue of nearly 6,400 estates situated in 11,000 villages; that some villages contained portions of more than 60 estates, while some estates were situated in more than 100 villages. I may add to this that the settlement of revenue was made for every individual estate by Mr. Maddox himself, and that, at the present time, the proprietors of only five estates have refused to accept the assessment that has been made. The rules under which this considerable work was carried out, and the forms in which the necessary statistics were compiled, are given at length in Appendix C, and the essential parts of them have been also reproduced by Mr. Maddox in paragraphs 478 to 481 of his report. In cases in which the settled revenue did not exceed Rs. 100, the settlement was made by Mr. Maddox, and in all other cases the settlement was submitted for the approval of the Commissioner of the Division. When, however, the Commissioner differed from the Settlement Officer, or when it was proposed to take more than 55 or less than 50 per cent of the assets, the proceedings were subject to the final confirmation of the Board. The rules worked smoothly and have produced an adequate increase of revenue. The zamindars have been convinced of the leniency of the Government proposals, which have been carried out with great care and tact by Mr. Maddox, and the result has been a Settlement fair to all parties, with an increased revenue that the Collectors should find no difficulty in realising.

34. The following is a brief *resume* of the principal results of the settlement of revenue, which occupied a large proportion of the Settlement staff from 1897 up to 1899. The figures given take no account of the comparatively insignificant deductions to be made during the first few years on account of *rasadi* allowances; they are the final figures of the revenue that will be ultimately realised from the year 1907. Including some Rs. 40,000 assessed on Government Estates, in which, of course, 100 per cent. of the assets is taken by Government, the following figures show the general results of the present settlement, as compared with the existing state of affairs found by the Settlement Department :—

DISTRICT.	Existing assets.	EXISTING REVENUE		Settled assets.	SETTLED REVENUE	
		Percentage of existing assets.	Amount.		Percentage.	Amount.
1	2	3	4	5	6	7
	Rs.		Rs.	Rs.		Rs.
Cuttack	18,47,400	38	7,14,100	20,72,900	53	10,99,300
Balasore	9,88,800	38	3,77,290	11,51,400	55	6,29,073
Puri	5,73,700	51	2,92,800	6,43,300	58	3,76,700
Total	34,09,900	41	13,84,190	38,6,600	54	21,05,073

The actual percentage of the assets taken as revenue thus works out to 54 per cent., and Mr. Maddox explains in paragraph 555 the circumstances in which the percentage varies in different districts.

The increase in revenue as shown in the above table amounts to 54 per cent. in Cuttack. 67 per cent. in Balasore, and 28 per cent. in Puri, or 52 per cent. for the Province as a whole. The incidence of the new revenue is compared with the incidence of revenue at the last settlement in the table below :—

DISTRICT.	ASSESSED AREA.		REVENUE.		INCIDENCE.		
	Last settlement.	Present settlement.	Last settlement.	Present settlement.	Last settlement.	Present settlement.	
1	2	3	4	5	6	7	
	Acres.	Acres.	Rs.	Rs.	Rs. A. P.	Rs.	A. P.
Cuttack	621,000	822,500	7,14,100	10,99,300	1 2 5	1	5 5
Balasore	493,200	692,200	3,77,290	6,29,073	0 12 3	0	14 6
Puri	302,400	373,300	2,92,800	3,76,700	0 15 6	1	0 2
Total	1,416,600	1,888,000	13,84,190	21,05,073	0 15 7	1	1 10

The effect of the present settlement on the incomes of the zamindars as they existed before it was undertaken can be obtained from the first table in this paragraph. The following are the resultant figures :—

DISTRICT.	Income before settlement.	Income after settlement.	Percentage of reduction.
1	2	3	4
	Rs.	Rs.	
Cuttack	11,33,300	9,73,600	14
Balasore	6,11,510	5,22,327	14
Puri	2,80,900	2,66,600	5
Total	20,25,710	17,62,584	13

It is noticeable that in Puri, where Government has taken 53 per cent. as revenue, the reduction in the income of the zamindars is only 5 per cent.

The figures for the income of the zamindars at the time of the last settlement, which have been given in paragraph 15 above, show that whereas they then received an income of Rs. 7,54,010 they will now receive an income of Rs. 17,62,000 so that while the revenue has been enhanced by Rs. 7,08,200 since the last settlement, or by 52 per cent., the income of the zamindars has increased by Rs. 10,08,000 or by 133 per cent.

The following statement shows the results of the settlement of revenue upon the incomes of the proprietary tenure-holders, the class that was bound to suffer most on the occasion of the re-settlement of the revenue. The enhancements have been softened in almost all cases by *rasadi* allowances :—

DISTRICT.	Existing income as shown in paragraph 15	SETTLED.			Percentage of reduction of income
		Assets.	Revenue.	Balance.	
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	
Cuttack	1,01,693	2,38,902	1,62,284	76,618	25
Balasore	49,672	1,19,435	85,804	33,631	32
Puri	96,332	2,92,530	2,23,981	68,549	29
Total	2,47,697	6,50,867	4,72,069	1,78,798	28

35. I am unable in this review to do justice to the great mass of office work, in the compilation of statistics, the correction of the records, the preparation of fair copies, and the classification of papers, that was done at head-quarters and at specially selected centres during the course of the operations. The fact that some 12,000 village records had to be dealt with, in addition to the completion reports and similar assessment papers for 6,400 estates, will serve to give some indication of the formidable programme that had to be got through, and the figures in paragraph 488 of the report show that some 21 million entries for separate fields were made in the course of the copying work alone, at a cost of over one and a quarter lakhs of rupees. The work connected with the publication of the records in each village both in draft and finally, was also severe, and the final arrangement of all papers for deposit in the Collectorate record-room was the subject of much careful consideration, and occupied a large establishment for an appreciable time. This and some details concerning the case-work under the Bengal Tenancy Act are dealt with in paragraphs 482 to 500 of the report. The following are the case-work figures, fortunately small, and it is a subject for sincere congratulation that the people of Orissa shewed so little inclination to take advantage of the opportunities for litigation afforded them by the Act under which the operations were conducted :—

District.	Objections under section 103 (Section 103 A of the amended Act).	Disputes under section 106.
Cuttack	32,120	5,751
Balasore	19,651	4,756
Puri	11,747	764
Total	<u>63,518</u>	<u>11,271</u>

The disputes raised in the district of Balasore were mostly connected with lands in the neighbourhood of the town of Balasore itself, and were undoubtedly to a great extent the work of touts and petty legal practitioners. The cost of the miscellaneous work described in this paragraph, and of the disposal of the cases entered in the above statement, is given by Mr. Maddox in paragraph 625 of his report, as follows :—

District.	Miscellaneous work. Rs.	Case work. Rs.
Cuttack.	61,000	1,82,000
Balasore.	50,000	1,08,000
Puri.	15,000	60,000
Total	<u>1,26,000</u>	<u>3,50,000</u>

36. I have included so many scattered figures in the course of the present review that it may be as well to briefly summarise the principal results of the settlement proceedings in tabular form for purposes of ready reference. I consequently give below some of the more important figures relating to (1) Extension of cultivation (2) Settlement of rents, (3) Assessment of revenue, and (4) the cost of the proceedings.

(1) *Areas* :— The following table shows the increase in areas cultivated, and in those liable to assessment, during the currency of the past settlement :—

DISTRICT.	CULTIVATED.			ASSESSED.		
	Last settlement.	Present settlement.	Percentage of increase.	Last settlement.	Present settlement.	Percentage of increase.
1	2	3	4	5	6	7
	Acres.	Acres.		Acres.	Acres.	
Cuttack ...	697,000	920,000	32	621,000	822,500	32
Balasore ...	554,000	776,000	40	493,200	692,200	40
Puri ...	377,000	464,000	23	302,400	373,200	23
Total ...	<u>1,628,000</u>	<u>2,160,000</u>	<u>33</u>	<u>1,416,600</u>	<u>1,888,000</u>	<u>33</u>

(2) *Rents*:—The statements below give comparative figures for the rents of the most important classes of tenants and for the total assets at various periods :—

(a) *Rents*:— Totals for the Province :—

CLASS OF TENANCY.	LAST SETTLEMENT.			EXISTING			PRESENT SETTLEMENT				
	Area.	Rent.	Incidence per acre.	Area.	Rent.	Incidence per acre.	Number.	Area.	Rent.	Incidence per acre	Enhancement per cent. over existing rents.
1	2	3	4	5	6	7	8	9	10	11	12
	Acres	Rs.	Rs. A. P.	Acres.	Rs.	Rs. A. P.		Acres	Rs.	Rs. A. P.	
Baziaftidars....	301,900	1,63,400	0 8 7	286,600	1,32,000	0 7 4	233,200	236,600	3,00,000	1 0 9	127
Thani	337,700	7,65,300	2 4 3	88,600	1,98,400	2 3 9	54,500	88,600	2,11,400	2 6 2	6.5
Thani Pahi ....	....	.....	.....	259,000	5,10,900	1 15 6	60,900	259,000	5,39,700	2 1 4	5.6
Pahi	570,900	8,95,700	1 9 1	927,800	20,16,700	2 2 9	700,600	927,800	2152,700	2 5 1	6.7

(b) *Assets* :—District by district :—

District.	621,000	11,21,000	1 12 10	822,500	18,47,400	2 4 0	650,800	822,500	20,72,900	2 8 4	12
Cuttack											
Balasore ..	493,500	5,75,600	1 2 8	692,200	9,88,800	1 6 10	370,209	692,200	11,51,400	1 10 7	16
Puri	302,400	4,41,600	1 7 4	373,360	5,73,700	1 8 7	204,400	373,300	6,43,300	1 11 7	1
Total....	1,416,600	21,38,200	1 8 0	1,888,000	34,09,500	1 12 10	1,225,290	1,888,000	38,67,600	2 1 0	13

(3) *Revenue*:—The following table summarises the results of the settlement of Government revenue :—

DISTRICT.	REVENUE AT THE LAST SETTLEMENT.			EXISTING REVENUE AT THE TIME OF SETTLEMENT			SETTLED REVENUE.			
	Percentage of assets.	Amount.	Incidence	Percentage of assets.	Amount.	Incidence	Percentage of assets.	Amount.	Incidence	Enhancement per cent.
1	2	3	4	5	6	7	8	9	10	11
		Rs.	Rs. A. P.		Rs.	Rs. A. P.		Rs.	Rs. A. P.	
Cuttack....	64	7,14,100	1 2 5	38	7,14,100	0 13 11	53	10,99,300	1 5 5	54
Balasore	65	3,77,290	0 12 3	38	3,77,290	0 8 8	55	6,29,073	0 14 6	67
Puri	66	2,92,800	0 15 6	51	2,92,800	0 12 6	58	3,70,700	1 0 2	28
Total....	64	13,84,190	0 15 7	41	13,84,190	0 11 9	54	21,05,073	1 1 10	52

(4) *Cost* :—The cost of the proceedings may be thus summarised. The figures are taken from Chapter XXV of the Final Report, with some necessary adjustments of the survey expenditure. The total area dealt with was 4,797

square miles excluding Khurda, the Ekhrajats, and Killas Aul, Darpan and madhupur:—

DISTRICT.	Survey and Khanapuri	Khanapuri inspection by the Settlement Department.	Attestation	Rent Settlement.	Revenue assessment.	Miscellaneous.	Total
1	2	3	4	5	6	7	8
(a) Expenditure....	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Cuttack....	4,32,500	75,000	4,80,000	1,86,000	1,90,000	2,43,000	16,06,500
Balasore....	2,74,500	33,000	1,80,000	1,01,000	67,000	1,58,000	8,13,500
Puri....	2,24,400	40,000	2,05,000	58,000	38,000	75,000	6,40,400
Total ...	9,31,400	1,48,000	8,05,000	3,45,000	2,95,000	4,76,000	30,60,400
(b) Rate per square mile							
Cuttack....	203	36	233	90	92	113	779
Balasore....	160	19	105	50	39	92	474
Puri....	219	39	250	56	37	74	625
Total....	194	31	180	72	61	99	637

37. Mr. Maddox touches upon the question of the maintenance of the records in paragraph 501, and quotes in full in that paragraph certain views on the subject that I have recently had the honour of submitting for the consideration of the Board and Government. The history of the question as it affects Orissa is to be found in paragraphs 9 to 11 of Mr. Finucane's letter No. 233T. R., dated 12th May 1897, printed as Appendix A-11 to this report and the full discussion of the principles involved in it is recorded in the minutes of the proceedings of a conference in Cuttack, contained in Appendix A-10. The present position of the question is that a draft Bill for the imposition of a patwari cess, and for the maintenance of the record by means of a local establishment of patwaris, with draft rules to be published under it, has been drawn up by the Settlement Department and submitted to the Board and to Government, but opportunity has been taken at the same time, with the permission of His Honour the Lieutenant-Governor, to represent again the very strong objections that are felt by the local officers and myself to the introduction of the proposed scheme, and the extremely heavy expenditure which will be involved in carrying it out. This representation is now before His Honour the Lieutenant-Governor, who is, I understand, awaiting the receipt of some further information as to the experience obtained in other provinces before dealing finally with it. In order to obtain this information it has been found necessary to make a reference to the Settlement Department of the North-Western Provinces and the Central Provinces. Their replies have recently been received, and the required report has now been, submitted to the Board.

38. In various paragraphs throughout the Final Report Mr. Maddox has made recommendations affecting the general administration of the Province and other Departments of Government, which are worthy of special attention, and which will in most cases doubtless form the subject of separate correspondence. I need do no more than indicate the more important of these recommendations, in order that they may not be inadvertently overlooked.

In paragraphs 23 to 27, 47, and 87 to 90 some valuable suggestions are made on the subject of canals and embankments, which will doubtless receive the attention of the Public Works Department. A separate representation is being

submitted to the Board on the subject of the devastation caused by the floods which pour through the Adlabad breach in Puri.

In paragraphs 103 to 118 the subject of irrigation and the imposition of an owner's rate on lands irrigable from or protected by, canals is dealt with. The question of an owner's rate will be specially reported upon by me, under the orders of Government, at an early date.

In paragraph 305 some recommendations are made, with which I do not wholly agree, on the subject of the recovery of rents from proprietary tenure holders by the zamindars.

There are some noticeable remarks contained in paragraph 309 on the creation of middlemen by the State in *khas mahals*.

In paragraph 344, Mr. Maddox makes certain recommendations on the subject of rent *kists*. The question of *kists* for the payment of revenue is dealt with in paragraph 565.

The question of the further extension of the provisions of the Bengal Tenancy Act is treated of in paragraphs 353 to 361.

Some suggestions as to the settlement procedure to be adopted on the occasion of the next settlement of Orissa, which have also an important bearing on the conduct of all large settlements in Bengal, are contained in paragraph 376.

In paragraph 456, Mr. Maddox expresses the regret-shared with him by most Settlement Officers in Bengal—that the power of reducing as well as of enhancing rents is not commonly entrusted to them.

The important proposals made in paragraph 474 for the inspection and preservation of the lands reserved as grazing and cremation grounds will not, I hope, be overlooked by the local officers or by Government.

Some suggestions as to the treatment of *jalpahi* lands in Balasore are made in paragraph 611.

39. In conclusion, I would venture to invite the attention of the Board and of Government to the services rendered by those officers who have been mainly instrumental in carrying through the extensive operations that have been reviewed above.

Of the subordinate officers of the Survey Department I am unable to speak with knowledge. I believe that Messrs. R. C. Ewing and A. W. Smart are worthy of the commendation expressed by Mr. Maddox. The Board are, however, well aware of the great value of the services which were rendered by Colonel Sandeman and Captain Crichton throughout the survey operations in Orissa. Colonel Sandeman brought an extensive experience of work in other parts of India to bear upon those operations when they were entering their most important stage, and completely reorganised the system under which the Survey and Settlement Departments jointly controlled the work. Captain Crichton equally identified himself with the interests of good survey and *khanapuri*, and rendered capable assistance to the Director of Bengal Surveys in every detail of the proceedings.

Mr. Finucane, I. C. S., C. S. I., as Director of Land Records and Agriculture, issued the first instructions for the guidance of Assistant Settlement Officers, and subsequently indicated the broad principles and lines of procedure upon which rents were eventually settled throughout the province.

From May 1892 up to November 1897, with one brief interval, Mr. W. C. Macpherson, I. C. S., directed and supervised every detail of the operations of the Settlement Department. During that period he constantly visited Orissa and conferred with the officers of his Department on the spot while in a large number of valuable reports he brought together the information collected by them on multifarious subjects connected with the work, and either determined the principles upon which most of the important questions connected with the conduct of the operations should proceed, or presented those questions in a complete form for the determination of Government. During the stages of record-writing and attestation, in the experiments undertaken for the determination of the principles and methods to be adopted in the settlement of rents, in all the operations connected with the assessment of revenue, and in almost every detail of the office work involved in these operations, Mr. Macpherson's assistance and

advice were never wanting, and the recommendations made by him to the Board and to Government were in almost all cases accepted and approved.

Mr. W. Maude, I. C. S., came to Orissa as Settlement Officer in November 1892, and left after his health had failed in February 1896. He took up the work at a most critical time, when it was suffering from want of organisation and much ignorance of the essential principles upon which it should be conducted. Mr. Maude rapidly evolved rules for record-writing and attestation, thoroughly organised these stages of the work, and by unremitting inspection raised the standard and the quality of the work done by a large staff of subordinates. He was also intimately associated with the successful labours of Mr. Macpherson during the three and a half years of his stay in Orissa, and on several occasions received the special thanks of Government for the services he rendered.

Mr. E. H. C. Walsh, I. C. S., was connected with the proceedings for a short period, in the years 1891 to 1892, and distinguished himself by sound work at a time that it was sadly needed.

Mr. Ambika Charan Sen of the Statutory Civil Service worked for some four years as an Assistant Settlement Officer in Orissa, and acquired a considerable knowledge of the Province, which has been utilised by Mr. Maddox, with cordial acknowledgments, in his report.

The services of Mr. R. Nathan, I. C. S., as an Assistant Settlement Officer during the period from November 1891 to February 1894, were of great value to the proceedings. Mr. Nathan contributed largely to the right determination of the principles which should govern record-writing and attestation, and in his report on the Kotdes pargana, which was based on experimental assessment work of an elaborate nature in no fewer than four hundred villages, he indicated the lines upon which some of the chief difficulties attending the work should be dealt with. Mr. Nathan's energy and devotion to his duties resulted in the breakdown of his health. His departure on sick leave in 1894 was a serious loss to the Department.

Messrs. J. G. Cumming and C. A. Radice of the Imperial Civil Service both rendered great assistance in the earlier stages of the work, in the inspection of *khanapuri*, and in the conduct of attestation.

Mr. Hugh McPherson, I. C. S., did much valuable work in Puri from 1896 to 1898, his capacity for organisation being of great service in copying with the difficulties met with in the final completion of the work in that district. His excellent report on the operations in Puri is printed as an appendix to Mr. Maddox's report.

Mr. Maddox very cordially acknowledges the services of Mr. J. E. Webster, I. C. S., who was his right-hand man for four years, both as Assistant Settlement Officer in charge of Cuttack and as superintendent of the large amount of office work done in the head-quarters office. Mr. Webster has rendered excellent service in the preparation of rules and forms, in the energetic and tactful inspection of a considerable staff of subordinates, and in the compilation of the Final Report.

Mr. H. D. deM. Carey, I. C. S., was a member of the settlement staff for two years, and Mr. Maddox testifies to the value of the services rendered by him in the drafting of rules and instructions, and in the preparation of the forms for the completion reports.

Mr. W. B. Thomson, I. C. S., rendered much assistance to the work, for over two years, from 1894 to 1897, when his health unfortunately failed him, and he had to revert to the general line.

The services of Mr. Douglas H. Kingsford, the most junior of the members of the Imperial Civil Service who have been connected with the settlement of Orissa, have been by no means the least conspicuous. Mr. Kingsford joined the Department in 1895, and in 1897 was placed in subordinate charge of the operations in the district of Balasore, a responsible and onerous post. Mr. Kingsford has performed his duties with much ability and energy, and his capable report on the work in Balasore, which is published as an appendix to the Final Report, displayed considerable knowledge of the people among whom he laboured.

Among the Deputy and Sub-Deputy Collectors appointed from time to time as Assistant Settlement Officers there were many who did good work, some who succeeded only fairly, and a few who proved definite failures. A considerable proportion were unable to bear the strain of work and exposure involved in the conduct of their duties, and were consequently unable, to do their abilities justice or to bring their labours to a wholly successful termination. The casualty list has indeed been a heavy one throughout the operations, and the comparatively short list of officers in these grades that I now submit for the favourable consideration of Government would have been much lengthened had several officers of promise been physically strong enough to remain at their posts for a longer period.

I can myself certify to the admirable work done by the officers named below, whom I now recommend to the favourable notice of the Board and Government for able and loyal service in the settlement of Orissa :—

Babu Jamini Mohan Das,	Deputy Magistrate and Deputy Collector.
Babu Govinda Chandra Das Gupta,	„ „
Babu Sri Gopal Bhattacharya,	„ „
Babu Sriram Chandra Bose,	„ „
Babu Jotindra Mohan Sinha,	„ „
Mr. James Taylor,	„ „
Babu Prasanna Kumar Banerji,	„ „
Babu Akshoy Kumar Sen,	„ „
Babu Giris Chandra Dutt,	„ „
Babu Jogendra Narain Mitra, formerly Personal Assistant to the Settlement Officer of Orissa, now Deputy Magistrate and Deputy Collector.	„ „
Babu Abhoy Persadh Das, Sub-Deputy Magistrate and Sub-Deputy Collector.	„ „
Babu Hara Krishna Mahanti	„ „
Maulavi Mahomed Chainuddin,	„ „
Babu Jagannath Datta	Sadar Kanungo, Balasore.

I have reserved to the last my notice of the exceptional services which have been rendered by Mr. S. L. Maddox, I.C.S., in the course of this settlement.

Mr. Maddox joined as an Assistant Settlement Officer in Balasore in October, 1892, and was almost continuously employed on settlement duty in the Province up to December 1899. In October 1894, he was placed in independent charge of the operations in Balasore, and from March 1896 he has held the very responsible post of Settlement Officer of the whole Province. For seven years he has given his whole abilities and energies to the efficient conduct of these proceedings, working with an unceasing devotion to his duties that has seriously affected his eye-sight and his health. He has impressed with the mark of his ability every stage of the work, and is directly responsible for the organisation and completion of the settlement of rents for one and a half million tenants, and for the assessment to revenue of nearly six thousand four hundred estates. The final success of the settlement is due in no small degree to the loyalty, energy and resource displayed by him, to his consideration for, and sympathy with, the people of Orissa and to his tactful control of a staff which sometimes numbered over forty officers.

I have the honour to be,
Sir,
Your most obedient servant,
P. C. Lyon,
*Director of the Dept. of Land
Records and Agriculture, Bengal.*

BOARD OF REVENUE, L. P.
LAND REVENUE DEPARTMENT.
S. & S. BRANCH.

No. 1304 A.

From

R. W. CARLYLE, Esq., C. I. E.,
Offg. Secretary to the Board of Revenue, L. P.,

To

THE SECRETARY TO THE GOVERNMENT OF BENGAL,
REVENUE DEPARTMENT.

Dated Calcutta, the 7th November 1900.

Land Revenue Dept.
Survey and Settlement Branch

Member in charge,
G. Toynbee, Esq.

Sir,

I AM directed to forward herewith, for the orders of Government, under Part III, Chapter 13, Rule 4 (v), page 102 of the Survey and Settlement Manual, 1895, the Final Report on the Settlement of Orissa (exclusive of Khurda) by the Settlement Officer, Mr. S. L. Maddox, I. C. S. together with very complete reviews thereof by Mr. P. C. Lyon, I. C. S., the Director of Land Records & Agriculture, Bengal, and by the Officiating Commissioner, Mr. E. B. Harris. The Final Report on the Revision of the Khurda Settlement was forwarded to Government with the Board's letter No. 597A, dated 5th May 1900, and the submission of the present Report completes the history of the re-settlement of the whole Province.

2. As the Director's review deals exhaustively with the main features of the settlement operations and their results, the Board will not go over the same ground again, but will content themselves with making such general observations as appear to them to be called for, or to be of interest.

3. *General arrangement of the Report.*—The Board are of opinion that the arrangement of the various Chapter of the Report might have been improved upon, and that a considerable amount of the information given in the body thereof need not have been repeated in the Appendices. For instance, Chapter IX comes more naturally after Chapter I; Chapter XI after Chapter V; Chapter X after Chapter XII, and so on; and a good deal of the information in Chapters II, III, and IV—the statistical accounts of the three districts of Cuttack, Balasore, and Puri—is repeated almost *verbatim* in the Appendices. The Board, however, agree with the Director that such minor defects as the above are of no practical consequence in a report which, with its Appendices, extends over a total number of more than eleven hundred pages, and which is not only a monumental work of patient research and conscientious record of facts, but is also a work of reference so complete in itself that officers who serve in Orissa in future will hardly have to turn to any other for any possible information they may require for administrative purposes. Its value is further enhanced by the table of contents, the glossary of native terms, and the index and maps which accompany it.

4. Although, as indicated in the preceding paragraph, the Board have criticised Mr. Maddox's sequence and arrangement of subjects, they have, in making the observations which follow, dealt with them, for the sake of facility of reference, in the order in which they occur in the Final Report.

5. *Magnitude of the Operations.*—The magnitude of the survey and settlement operations and the onerous nature of the work done may be gauged

by the figures given in Paragraph 3 of the Report, where it is stated that the operations extended over a period of ten years and over an area of 5,000 square miles; that rents have been settled for a million and a-half of tenants; and that the Government revenue of over 6,000 estates has been raised from about 14 lakhs to over 21 lakhs of rupees—an increase of over 52 per cent. The Commissioner in paragraph 4 of his review has given a just appreciation of the work done by the officers engaged in the settlement operations.

6. Chapters II, III, and IV.—The Board have no criticisms or other remarks to offer on these Chapters of the Report, which contain statistical and Physical accounts of the three districts of Cuttack, Balasore, and Puri. The information therein given regarding irrigation and embankments has been dealt with by the Board in their remarks on Chapter V, which follow.

7. *Irrigation* :—In Chapter V, and in various other paragraphs of his Report, Mr. Maddox has discussed the question of irrigation as affecting rents and revenue. It is, in the Board's opinion, clearly demonstrated that irrigation in Orissa, where the annual rainfall averages 62.02 (*see page 79*), is of the nature of an insurance against drought rather than a necessity (as in the country watered by the Godavari canals), or as a means of increasing the area of cultivation or the yield of crops grown on irrigated lands. The exhausting effect which the raiyats believe canal irrigation to have on the soil has to be set off, in the latter case, against an increased yield. It must also, the Board think, be admitted that the experiments as to the yield of rice on irrigated and unirrigated areas have not yet been made on a sufficiently extensive scale to warrant any certain or reliable conclusions being based upon them. The opinion expressed by the Settlement Officer, viz., that in ordinary years the average outturn is not very much less on unirrigated than on irrigated lands (*pages 82 and 83*), is borne out by the fact that rents are not markedly higher in the latter than in the former (*page 89*). The greatest benefit of irrigation is shown to be its effect on the collection of rents and of revenue. It does not, however, appear possible at present to tax this benefit in a direct manner by the imposition of a special rate on irrigated lands. The indirect benefits to the State are enormous, though they cannot be calculated; but it may be safely asserted that the saving of expenditure on famine relief and the absence of the necessity of making remissions for loss of crops on irrigated areas are of immense value to the State. Mr. Maddox has explained in paragraph 115 (*page 91*) of his Report why the State has not been able to take its full share of the direct advantages which the irrigation works confer on both raiyats and zamindars in the temporarily-settled tracts. The reasons are—(i) the orders of the Secretary of State limiting the percentage of assets to be taken by Government to 55 per cent. save in very exceptional cases; (ii) the strict interpretation put on those orders by the Board of Revenue; and (iii) the necessity of not running the proprietors by a too sudden and large deduction of their incomes. For the strict interpretation placed by the Board on the Secretary of State's orders (which are reproduced in full on *page 122*, Appendix A of the volume of Appendices) Mr. Toynbee accepts the full responsibility. If any justification of his action be required, it is to be found in the third of the reasons given above. Wherever it has been possible, without hardship or injustice, to raise the percentage above 55 per cent., it has been done; but the cases in which such an increase has been due solely to irrigation or to protection, are very few and far between. Many other complicated and intricate reasons have had to be considered. At the next settlement, however, with the conditions of the Province radically changed by the opening of the East Coast Railway, and with increased knowledge of its material and agricultural circumstances, it will, in Mr. Toynbee's opinion, be possible for Government to take a higher percentage of the assets of temporarily-settled irrigated lands (estimated by Mr. A. W. Inglis at *page 45* of his "Narrative" to extend over 300,000 acres), and so to recoup themselves to some extent for the capital expenditure of over 2½ crores of rupees—to say nothing of the annual charge for interest of over ten lakhs of rupees—which has been sunk up to the 31st March 1899 in the construction of the canals (Mr. Inglis, "Narrative", *page 55*).

8. *Owner's Rate*—As regards the question of the imposition of an "owner's rate" on irrigated and protected areas in the permanently-settled estates of Orissa, the Board are of opinion that its consideration should be

postponed during the currency of the new settlement. If at the next settlement it be determined to take for Government a higher percentage of the assets of irrigated and protected areas in the temporarily-settled area, it may not be considered impossible or inequitable to impose an owner's rate on similar lands in the permanently-settled tracts. In face of the facts and figures set out in Chapter V of the Report, Mr. Toynbee does not think that the question is any nearer to a practical solution than it was in 1877, when he was placed on special duty to collect information in support of the Bill for the imposition of an owner's rate. This Bill was introduced into the Bengal Council on the 31st March 1877 but was dropped in the following December. If, however, as is stated in paragraph 481 on page 323 of the Final Report only 50 per cent. of the assets was generally taken as revenue in temporarily-settled estates specially exposed to flood and liable to drought, the Board see no reason whatever why at the next settlement at least 60 per cent should not be taken from such estates as are found, after an enquiry such as that indicated in the next paragraph, to be fully protected from such calamities by embankments and canals constructed and maintained at the sole cost of Government. On this subject the remarks made by the Commissioner in paragraphs 12 to 14 of his review may be referred to ; but as the question will be dealt with separately (like the Patwari cess question), the Board will not here enter into further details.

9. *Embankments* :—If it was found impossible during the settlement operations to definitely fix and assess the benefits derived from irrigation, it was found a still more hopeless task to do so in regard to lands protected by the canal or other embankments constructed and repaired by Government. The Settlement Officer has shown in paragraph 90 (*page 61*), paragraph 544 (*page 368*), paragraph 545, Block VIII (*pages 376 and 377*), and in other parts of his Report, *e g.*, paragraph 481 (*page 323*), the disastrous effects of flood damages on rents and revenue. With his letter No. 1741S., dated 24th August 1900, the Director of Land Records submitted a report of the effect on the agricultural conditions and the land revenue of certain villages in parganas Purbaduai, Oldhar, Athaisi, Matkatpatna and Rahang in the district of Puri, of the policy adopted by Government of leaving open the breach at Adlabad in the Bhargavi left embankment, and has in conjunction with the local officers (Collector, Commissioner and Settlement Officer), recommended a reconsideration of the above policy. It is represented that if the breach is kept open, it will cause a loss to Government of revenue of over Rs. 3,200 per annum for five years, or of nearly a lakh of rupees for the whole term of the 30 years' settlement. A copy of the Director's letter with all its enclosures has been separately submitted to Government for order. (*Vide* Board's No. 1305A, dated 7th November 1900). The Board think that the whole question of the Orissa protective embankments has hitherto been too exclusively considered from an *engineering* rather than from a *revenue* point of view. The publication of Mr. A. W. Inglis' "Narrative" of Irrigation and Embankments in Orissa" and of the Settlement Report now under review renders it desirable, in the Board's opinion, that the whole question of embankments in Orissa should be reconsidered by a Commission in view of the probable effects of the existing state of affairs on the revenue of the next settlement. The question of the abandonment of the coast canal, which is raised in paragraph 48 (*page 30*) might also be considered at the same time. The figures given on page 175 of the Report are instructive in this connection as showing that during 36 years of the previous settlement, a sum of no less than 45½ lakhs of rupees was remitted, of which Rs. 19,74,339 was on account of inundation and Rs. 25,79,402 on account of drought.

10. *Agriculture*—Chapter VI of the Report is a mine of information on agricultural subjects, but, as remarked in paragraph 3, a good deal of the subject-matter has been repeated *verbatim* in the Appendices. The account given, on page 100, of the Uriya system of measurement is specially interesting, and not one of the least useful results of the settlement operations is the introduction of a uniform system of land measurement in acres and decimals, which is already fully understood in the Khurda Government estate. In paragraph 126 it is stated that rice is grown in nearly 88 per cent. of the cultivated area. The Province is, therefore, practically dependent for its food-supply and prosperity on this one crop. It was this fact which caused the unusual severity of the great Orissa

famine of 1865-66 in a Province which was then practically cut off from communication with the outer world. The observations of the Commissioner on this subject (*vide* paragraph 6 of his Report) are interesting and instructive.

11. *Prices*:—As intimately connected with the subject of agriculture, the Settlement Officer has in Chapter VII of his Report, brought together in a most useful and readable form all the available information on the subject of prices. Here also there is some repetition in the Appendices, but this is a matter of slight moment. This chapter is specially valuable in view of the fact, disclosed by the settlement operations, that the margin of cultivation in the temporarily-settled area has nearly been reached, and that any future enhancements of rents and revenue made at the next settlement will have to be based on the rise of prices due to the general opening up of the Province by improved railway and other communications.

12. *Material condition of the people*:—Chapter VIII treats of the material condition of the people, and is a most valuable contribution to our knowledge of Orissa and its inhabitants. It will be of the utmost service to future administrators of the three districts. The improvement in the resources of the country during the last thirty years is remarkable (paragraph 136); but the Board would observe, as regards the conclusions come to by Mr. Maddox on page 142 of his Report, that there is still a vast area of cultivable waste land in the Tributary States which will probably come under cultivation during the next thirty years owing to the opening of the East Coast Railway and the increasing pressure on the soil of the Mogulbandi. A mine of wealth will be opened to the Chiefs if the branch line, for which surveys have been made through their States from Sambalpur to Khurda, is constructed; and in such case they ought certainly to give the necessary land free of cost.

13. *Early history*:—Chapters IX and X are mainly historical, and the Board do not propose to offer any remarks on them. A new and very interesting point, noticed in paragraph 221 (*page 151*)—, viz, the bestowal by zamindars of titular names—appears to the Board to be worthy of further inquiry and elucidation in connection with the coming census.

14. *Land tenures*:—Chapter XI, which deals with this subject, is one of the most valuable and important parts of the Report, both from the historical and modern points of view. It brings together in a concise form, the views of the various authorities who have written on the subject, and shows the changes which the last sixty years have brought about.

15. *Illegal cesses*:—The number of *abwabs*, or illegal cesses, enumerated in paragraph 266 (*page 174*) is somewhat alarming; but the Board believe that their rights have been so carefully explained to the raiyats by the Settlement Officers engaged, during the past ten years, in the survey and settlement operations that any such payments which are now made are either purely voluntary or paid as a matter of policy, and are indicative rather of patriarchal relations and good feeling than of oppression and violence. The personal good feeling between landlords and tenants has, perhaps, survived longer in backward Orissa than in more advanced Bengal, and the Board do not think that anything further than the settlement record is needed to protect a tenant from unwillingly making any further payment than that of his rent as recorded therein.

16. *Elimination of the Middleman*:—The Board agree, on the whole, with the view taken by Mr. Maddox in paragraph 298 (*page 198*) of the Report that the gradual elimination of the middleman in Orissa is a result to be desired. It is not quite clear, reading paragraph 330 (*page 224*) with paragraph 298, to what extent the law of merger has actually been applied during the settlement operations. From the latter paragraph the Board would infer that it has not been applied at all, but from the former it would seem to have been applied only to the case of raiyati occupancy rights purchased by a zamindar or proprietary tenure-holder. Further information will be called for on this point.

17. *Proprietary tenure-holders*:—Paragraphs 300-305 of the Report deal with the relations between zamindars and the several classes of proprietary tenure-holders, and discuss three suggestions (*see page 201*), which have been made for giving to the former increased facilities for collecting their rents from latter. In the Board's opinion the first suggestion made by Mr. Maddox, viz, the

extension of the Bengal Patni Regulations, and the third, the establishment of a special Court, are impracticable and need not be further discussed. The second—the extension to Orissa of certain sections of the Bengal Tenancy Act—will be considered in connection with Chapter XIII. From paragraph 301 of the Report it is clear that the zamindars have, at present, reasonable facilities for collection if they take the trouble to use them. There is no urgency for any change, and the Board think that the question may, for the present, be left to gradually solve itself. They are not in favour of the suggestion made by Mr. Maddox in paragraph 304, viz., that the existing individual engagements entered into with the whole body of sarbarakars should be cancelled, and that new ones should be taken from only one or two of the principal sarbarakars. On this subject the Officiating Commissioner Mr. E. B. Harris, writes as follows :—

“The practical difficulty of carrying out the proposal is that it will considerably delay the completion of the settlement. It is pretty certain that the superseded sarbarakars would strongly oppose the cancelling of the kabaliyats. The Act would probably be regarded as a breach of faith. I venture to say it would not be good policy to take the step recommended by Mr. Maddox ***. At present the khewats show the names of all co-sharers in sarbarakari tenures. In course of time changes will take place by inheritance or transfer. The same thing will happen if one or two selected sarbarakars sign the kabaliyats. In either case other persons, besides those whose names appear on the record, will have to be joined as co-defendants in rent suits.” The Board share the Commissioner’s views, and consider that it was a great pity that the procedure of the last settlement was not again followed. The omission was due to an oversight on the part of the Settlement Officer.

18. As regards the first of the specific recommendations made in paragraph 303, the Board have already indicated their desire to deal with it in connection with the question of the extension to Orissa of the whole of the Bengal Tenancy Act, which has not already been extended. They are, as already stated in paragraph 17 above, not in favour of the second recommendation. The Board have no objection to the adoption of the third so long as it is not carried out wholesale but tentatively, and by way of making examples of flagrant instances—*pour encourager les autres*. They approve the fourth suggestion, which is in accordance with the view taken by them in paragraph 17. The Commissioner’s remarks on these proposals will be found in paragraph 23 of his review.

19. *Transfer of raiyati holdings*:—In paragraph 328 is discussed the very important subject of the transfer of raiyati holdings. Mr. Maddox says :—

“In all three districts there has been an enormous increase in the number of transfers since the commencement of the settlement operations, and since their close sales and mortgages of holdings and parts of holdings have become so common as to arouse the apprehensions of zamindars and district officers”.

In forwarding the Final Settlement Report of the Government estate of Khurda, the Board expressed their views in favour of the unrestricted right of transfer of whole holdings and against the subdivision thereof by sale or mortgage of portions only save in exceptional cases like that of Khurda. They adhere to these views in respect to Orissa generally. The value of a raiyati holding appears to have been enormously raised by the settlement operations. On the suggestion made by Mr. Maddox in paragraph 328 (*page* 222), the Board will consult the local officers and the Inspector-General of Registration before asking Government to take any action. It appears from paragraph 28 of the Commissioner’s review that he has already called for further information on this subject.

20. *Extension of the Bengal Tenancy Act*—Paragraphs 330 and 331 of Report, on the subject of the Bengal Tenancy Act, would, in the Board’s opinion, have come more naturally under Chapter XIII (*page* 245). They are of great interest and importance, and will be considered in connection with the above Chapter. In paragraph 16 of this letter the Board have already noted the question of merger adverted to on *page* 225. As regards Mr. Maddox’s remarks on the enforcement of the provisions of sections 56 to 60 of the Bengal Tenancy Act, the Board observe that the difficulty pointed out is also felt in Bengal. In view of the important part which rent-receipts are likely to play in the revision proceedings of the next settlement, the Board think that a special and more simple form of rent-receipt should be prescribed for use in Orissa, and that its headings should, for purposes of identification, correspond as far as possible with those

given in the *parchas* and in the settlement records. They will consult the Director of Land Records & the local officers on the subject before making any definite recommendation. The question raised as to the legal means of enforcement is not peculiar to Orissa and need not therefore be separately discussed in connection with the settlement report.

21. *Dates of payment of rent* :—In Chapter XII and in paragraph 565 (page 393) of his Report Mr. Maddox has dealt with the subject of rent demand and collection and has shown that (as Mr. Toynbee believes is also the case in Bengal) the tendency of zamindars has been to forsake the old rent-kists fixed at, and entered in the daks of, the last settlement, and to make the bulk of their collections on the approach of the latest day for the payment of their Government revenue (paragraph 344). These dates are 28th April and 8th November, and Government has in its order No. 3992, dated 30th December 1898, decided not to change these dates. It asked, however, if the proportion of payments on the two latest dates could not be advantageously changed. In Board's No. 508A, dated 19th April, 1900, they agreed with the Commissioner Mr. Marindin that no change is required. The final orders of Government on this question have not yet been received. The methods of rent-collection adopted by Uriya zamindars do not apparently differ materially from those followed by their Bengali brethren, but the percentage collected by them is, in the Board's opinion, considerably higher in Orissa than in Bengal. How far this is due, if due at all to the jurisdiction of the Revenue, as opposed to that of the Civil, Courts it is impossible to say; but it is not improbable that the existence of a large number of petty Uriya resident proprietors, and the able and efficient management of some of the Bengali absentee zamindars, may also partially account for it. It will be seen that the standard of collections is highest in the irrigated and protected areas, and lowest in the tracts damaged by floods (page 241). It is not clear whether or not, in calculating the percentages shown in the margin, limitation-barred and therefore legally irrecoverable arrears have been included in the demand. It is the universal practice of zamindars to keep these on their books as long as possible, and one of the most difficult and important tasks of the Court of Wards when first taking charge of an estate is to have these written off and wiped out once for all. The cost of collection incurred by zamindars is estimated by the Settlement Officer to vary from 5 to 10 per cent. (paragraph 352) of the *mufassal jama* in ordinary estates and in especial and extreme cases from 6 to 16 per cent. It is interesting to compare with the above figures the actual average cost of management and collection in Government and wards' estates in Bengal for the five years 1894-95 to 1898-99, which were 6.7 per cent and 7.9 per cent. respectively, the Government standard in the former being 6 per cent. for the whole Province.

22. *Further extension of the Bengal Tenancy Act*—In Chapter XIII (Page 245) Mr. Maddox has dealt very fully with the question of the extension to Orissa of such sections of the Bengal Tenancy Act as have not yet been extended thereto. Paragraph 361 gives a summary of his recommendations. The Board agree with him that the jurisdiction of the Revenue Courts in the trial of rent suits should be retained for the present at any rate, in order that the District Officers may closely watch the effect of the new rents fixed by the settlement, and be otherwise in direct touch with the relations between landlords and tenants. In this connection the Board's letter to Government No. 334A, dated 5th March 1894, should be referred to. As regards the extension of specified section, the Board agree in the proposal made in paragraph 361 (b) of the Report, viz., that sections 2 (2), 2 (3), 2 (4), 8, 9, 5, 7, 16-83, 39, 116-120, 173-183, to which they would also add section 31A, be introduced at once, "being dependent on sections already in force (*vide* paragraph 361 (a)), or because they have been already used by the Settlement Department".

As regards the introduction of the remaining sections, the Board propose to consult the Legal Remembrancer, the Director of Land Records, and the local officers before making any definite and specific recommendation. The Commissioner has already called for the local officers' opinions, and promises a further report. It will probably be found possible, when the whole question has been

threshed out, to extend the whole of the Act, with the exception of certain specified chapters or sections. A notification in this form would, in the Board's opinion, be more convenient for reference than the present practice of issuing piece-meal notifications.

23. *Settlement Procedure* :—The Board do not propose to make any detailed remarks on Chapters XIV to XX, which relate to the subject of procedure, as it has been very completely dealt with by Mr. Lyon in his review. The record of the early mistakes made, and of the difficulties met with and overcome, will be of the greatest possible use at the next settlement, and no apology is needed for their inclusion in the Report and Appendices. It would, in the Board's opinion, be premature to offer an opinion at present on the views put forward by Mr. Maddox in paragraphs 376 and 377 of his Report. It is well that they should have been placed on record, but any orders on them may well wait until the time for the next settlement draws nearer.

24. *Assessment of Government Revenue* :—The Board desire to draw the attention of Government to the strict and detailed scrutiny which has been exercised by the Settlement Officer, Mr. Maddox, in the assessment of the Government revenue on over 6,300 estates. To quote his own words, he has "made remarks and passed orders on every estate, however small". Up to the date of the submission of this letter, the number of settlement reports that have come before the Board is 913. Every one of these gives ample evidence of the labour bestowed upon it by the Assistant Settlement Officer concerned and by the Settlement Officer himself. The Board have upheld the Settlement Officer's recommendations as they stood in no less than 782 cases, and have modified them only in 126. The assessment records, so far as Mr. Toynbee, with his want of personal experience in detailed settlement operations, is able to judge, are complete and exhaustive both in form and substance. The number of cases now pending for confirmation is 5 in which references have been made.

Out of the 908 cases hitherto disposed of by the Board, revenue has been taken at more than 55 per cent. in 581 cases and at less than 50 per cent. in 78 cases, the revenues of the remainder ranging between 50 and 55 per cent. The chief reasons which influenced the Board in fixing revenue at more than 55 per cent. are: (i) protection from flood and drought secured by embankments and canals; (ii) no reduction of existing Government revenue without due and sufficient cause is justifiable; (iii) a fair share of the increased assets should be given to Government. The principal grounds which have induced the Board to accept revenue at less than 50 per cent. are—

- (i) Liability to flood, drought, etc.;
- (ii) Such an enormous increase in the assets since last settlement that to take even 50 per cent. would reduce the proprietor's present income to a ruinous extent;
- (iii) The scattered nature of estates which makes the cost of collection very heavy and which causes difficulty in the realisation of the full assets, and
- (iv) The absence of any likelihood of any considerable further extension of cultivation.

25. The Director of Land Records will be asked to report specially on the suggestion made in paragraph 486 relative to the preparation of an abstract of the *khassra*.

26. *Maintenance of the records* :—This important matter has been separately dealt with by the Board. In their letter to Government, No. 840A dated the 17th August 1899, they agreed with the Director of Land Records that the proposal to maintain the records by the agency of patwaris should be abandoned, and that, in its stead, a revision of the settlement records should be made after 15 years on the lines recently adopted in the Khurda Government estate. In its letter No. 4397 L.R., dated the 9th December 1899, the Government called for further information, which was collected by the Director of Land Records and submitted with the Board's letter No. 995A, dated the 20th August 1900. The Board adhere to their preference of periodical revision of the records over their annual maintenance by patwaris. As the question does not affect the settlement and its results, it is not necessary to dwell on it further in connection with this Report.

27. *Discrepancies in areas* :—Chapter XXI of the Report, dealing with the question of areas, is of some importance. The Board think that, with reference to paragraph 503, the areas of the three districts may be taken in future, for the purposes of the census and other statistics, to be Cuttack, 3,663; Balasore, 2,075, and Puri, 2,499 square miles. It is noted, however in paragraph 38 on page 24 that the area of the Balasore district is said to be $2\,076\frac{3}{4}$ square miles. The discrepancies pointed out in paragraph 504 are not, in the Board's opinion, of any serious consequence, and they may therefore be overlooked, the area shown in the completion reports being accepted as the correct area. The Director of Land Records is in communication with the Surveyor-General on the subject.

28. *Extension of cultivation* :—The Board agree with Mr. Maddox in the conclusion at which he arrives in paragraph 505 of his Report, viz., that the area assessed during the recent settlement operations may be safely taken, for all statistical purposes, to be the same as the cultivated area. In both cases the percentage of increase since the last settlement is over 33, while the increase of revenue is over 52 per cent. The figures given in paragraph 506 show that the margin of cultivation has been nearly reached in all the three districts, though it is wider in Balasore than in the other two. If any large extension of cultivation takes place in the Province, it will be in the Tributary States, which pay only a quit-rent fixed in perpetuity.

29. *Size of villages, holdings, and fields* :—Paragraphs 507-510 give very valuable and interesting information regarding the size of villages, etc. vide paragraph 7 of Director's Review. The Board observe as regards paragraph 509, which touches on the diminished size of holdings as evidence of their sub-division, that in the Khurda Government estate the figures for 172 villages show an opposite result, viz., an increase of average size from 1.44 to 1.58 acres (paragraph 46, page 24 of Settlement Officer's Review of Mr. Taylor's Final Report). This is, however, probably due to an extension of cultivation to the extent of an area of 26,000 acres. Even in Khurda, it was found that for every 13 complete holdings no less than 30 portions of holdings were transferred in the above villages.

30. *Rents and Revenues* :—In Chapter XXII, which is, perhaps, the most important chapter of his Report, Mr. Maddox has given full information regarding rents and revenue. As the Director of Land Records has given, in paragraphs 12 to 15 of his Review, a complete *resume* and analysis of the figures, the Board do not think it necessary to do the same. It will suffice for them to note that the "assessed area," which, as noted in paragraph 28 above, is equivalent to the "cultivated area" of the temporarily-settled portions of the Province, has increased since last settlement by 33 per cent. The incidence of rents per acre has similarly risen by 21 per cent., i. e., from Re. 1-8 to Re. 1-13, and has been settled at Rs. 2-1 (an increase of 38 per cent.), and in Khurda at Re. 1-10-6, the latter figure being 2 pie per rupee less than the highest enhancement legally possible. The increase in Government revenue is 52 per cent. Its incidence is given in paragraph 34 of the Director's review as having increased from Re. 0-15-7 of last settlement to Re. 1-1-10 at this settlement. The Board agree with Mr. Maddox that, "though the assessment is more lenient than that of the last settlement, a fairer distribution of its burdens has been made" (paragraph 514).

31. *Rents of Thani and Pahi lands* :—In paragraphs 519 to 526 Mr. Maddox has entered fully into the question of the assessment of *thani* and *pahi* lands and Mr. Lyon has also dealt with the subject in paragraph 30 of his Review. The Board are of opinion that Mr. Maddox has made out his claim "that the rents finally attested represent very nearly those which were generally being paid" (paragraph 522). He points out in paragraph 540 that, "while the assessment of Puri was, at the last settlement, higher than that of Balasore, not only has there been a far greater extension of cultivation in the latter district, but rent-rates have been nearly equalised in the two. In Cuttack, on the other hand, the former assessment was much higher than in the other districts, yet rent-rates have risen during the term of settlement to a greater extent than in Puri".

We consequently find that "the enhancements made in this settlement are equal in Cuttack and Puri, and one-third more in Balasore, the difference

being chiefly in the larger amount of excess area in the last district" (*paragraph 541*). The incidence of revenue in rupees per assessed acre in the three district is Cuttack 1.35, Balasore. 90, and Puri 1.09 (*paragraph 556*).

32. *Alteration of rents* :—In *paragraph 542* of his Report the Settlement Officer has given most interesting details of the alteration of rents, the main features of which are reproduced below :—

Rents increased for excess area	...	13 per cent.
Rents reduced for loss of area	...	3 "
Rents newly assessed	...	6 "
Rents altered on other grounds	...	24 "
Rents retained unaltered	...	54 "
		100

These figures bear out the assertion made in *paragraph 522* that the new assessment of revenue is based on the rents actually paid by the raiyats.

33. *Attitude of the people* :—The Board desire to call the special attention of Government to the figures given at the end of *paragraph 542* of the Report as showing how fully the people of Orissa have acquiesced in the equity and fairness of the settlement proceedings, and have appreciated the tact and forbearance shown by the Settlement Officers. Rents were settled for no less than 1,452,500 tenants, and yet the number of appeals was only 295. In 167, or more than half, of these cases, the decisions of the Assistant Settlement Officers were upheld; they were only reversed in 48 and modified in 8, while 72 cases were remanded for re-trial. The nature and extent of the case-work under the Bengal Tenancy Act is set out in *paragraph 35* of the Director's Review.

34. *Increase of Government Revenue* :—The whole of Part B of Chapter XXII, *paragraphs 546 to 565* of the Report, should be read in original. Mr. Lyon has, in *paragraphs 33 and 34* of his Review, brought out the salient points of the interesting and important information contained therein. In *paragraph 546* (*page 380*) Mr. Maddox has explained how an increase of Government revenue of 52 per cent. has been obtained, as against the anticipated increase of 47 per cent., and how the actual percentage of the assets taken as Government revenue has been 54 per cent, against the sanctioned range of percentage between 50 and 55 per cent. In this connection it must be remembered that in his Despatch No. 20 (Revenue), dated the 3rd February 1898, the Secretary of State said :— "The permission to go above 55 per cent. is to be very sparingly used." The Board trust that Government will be satisfied with this increase, the hardship of which has been softened by *rasadi* increments in special cases (*see paragraph 559*), and will agree with them that the present moderate and equitable assessment contrasts very favourably with the results of former settlements, which are set out in *paragraphs 547 to 553*. That undue leniency has not been shown to the zamindars is, in the Board's opinion, shown by the figures given in *paragraph 557*, where it is shown that their income has been reduced on paper by more than 2.63 lakhs of rupees, but that the actual reduction is still greater, as they will have to pay 7.21 lakhs more and receive 4.41 lakhs more, thus suffering a real loss of 2.80 lakhs, or rather less than 14 per cent. But, on the other hand, they should have no difficulty in meeting their engagements, as the incomes left to them are higher by 131 per cent. in Cuttack, by 79 per cent. in Puri, and by 167 per cent. in Balasore than they were at the conclusion of the settlement of 1837 (*paragraph 559*). If any further proof were wanted of the leniency of the settlement, it is to be found in the fact stated in *paragraph 564* that, at the time of writing, only five estates are recusant out of a total number of 6,369.

35. *Expenditure* :—As, in *paragraph 36 (4)* of his Review, the Director of Land Records has gone fully into the question of expenditure, which was under his direct control, the Board have only to remark that, whereas the total cost of the survey and settlement operations in the temporarily-settled area of Orissa, excluding Khurda, is As. 14.05 per acre, it was only As. 5.4 in that Government estate. The difference is due to the existence in Khurda of maps and records, which only required to be checked and attested, and the Board consider that the figure may be taken as a guide to the cost of the revision of the settlement records after the new settlement of the Province has run for 15 years, if it be decided not

* *Vide* Director of Land Record's review, *paragraph 34*, *page 20*. The figures given on *page 21* exclude khas mahals.

to maintain the records during the whole term of the settlement by means of a patwari agency.

36. *Merits of Officers*.—It only remains for the Board to cordially and gratefully endorse the acknowledgments of the Settlement Officer and of the Director of Land Records of the services of the officers employed in the survey and settlement operations, which are set out in detail in paragraphs 364 to 374 of the Final Report and in paragraph 39 of Mr. Lyon's Review thereof. It is impossible for the Board to appreciate these services too highly. Colonel Sandeman's co-operation and assistance were invaluable to the Settlement Officers, and have been suitably acknowledged by the Director. Maddox's services are, in the Board's opinion, deserving of some special form of acknowledgment. Mr. Lyon has, with becoming modesty, omitted any mention of his own services, but Mr. Toynbee wishes to place on record his own appreciation of the energy, ability, and tact displayed by him, and of the great and loyal assistance he has given him in the discussion and disposal of all the Orissa Settlement questions which have come before the Board for disposal during the term of his tenure of office. Mr. W. C. Macpherson's connection (as Director of Land Records) with the Orissa Settlement ceased before Mr. Toynbee became a Member of the Board, but as Commissioner of Orissa as well as in the Board he had fully opportunity of appreciating the zeal, energy and ability which for nearly five years Mr. Macpherson devoted to the work of the Orissa Settlement in its earlier stages.

I have the honour to be
SIR
Your most obedient servant,
R. W. CARLYLE,
Offg. Secretary,

REVENUE DEPARTMENT.

LAND REVENUE—No. 1532T.—R

DARJEELING, THE 4TH OCTOBER 1901.

RESOLUTION.

READ—

The final Report on the Settlement of the Province of Orissa (exclusive of Khurda) by Mr. S. L. Maddox, I. C. S.

Read also—

The Director of Land Records' letter No. 1549 S., dated the 24th July 1900, to the Board of Revenue, reviewing the above report, and the Board's letter No. 1304 A., dated the 7th November 1900, submitting it to Government with their remarks.

Introductory.—The elaborate and very interesting report submitted by Mr. Maddox completes the history of the re-settlement of the Province of Orissa. It deals with the history of the Province and the races inhabiting it, its agriculture, and the material condition of the people, the fiscal history of the temporarily-settled areas under settlement, the proceedings undertaken for their resettlement, and the results of those proceedings, as they have affected both the Government and the people. The Director of Land Records rightly calls it a "veritable Encyclopaedia of the Province". So momentous an undertaking will not again be necessary.

2. *Nature of the Operations.*—The work of the Settlement Officer was one of great magnitude. The operations extended over a period of ten years from the end of 1889 to the end of 1899 and over an area of 5,000 square miles. Rents have been settled for a million and-a-half of tenants, and the Government revenue on nearly six and-a-half thousand estates.

3. *Area.*—The area of the Province amounts to over 24,000 square miles, of which about 17,000 square miles are covered by the hills in which are included the Tributary States, the district of Angul, and the Government Estate of Khurda in Puri, and 7,000 square miles by the alluvial plains lying between these hills and the plains. Mr. Maddox's report deals in detail with the survey and settlement of the plains portion of the Province, excluding the permanently-settled area and the area covered by the Chilka Lake. It appears that out of an area of 5,897 square miles, comprised in 13,589 villages, 3,903 square miles or 66 per cent. are cultivated, 544 square miles or 9 per cent. are culturable, but not cultivated and 1,450 square miles or 25 per cent. are unculturable. Out of the uncultivated area, 177 square miles or 3 per cent. of the total area have been formally reserved as grazing or cremation grounds and encroachment on these grounds has been strictly forbidden.

4. *Population.*—The population number 4,200,000, of which 4,090,000 are Hindus, while of the rest 98,000 are Muhammadans, 4,000 Christians, and 8,000 belong to other religions. In paragraph 219 of the report an interesting table is given of the various castes to which the Hindu population belongs, and from paragraph 170 it appears that 2½ millions are returned as agriculturists.

5. *Early Revenue Settlements* :—Mr. Maddox treats of the early revenue settlements of the Province, before the commencement of the British rule, in paragraphs 233 to 241 of the report. The first regular settlement of the Province was begun in A. D. 1582 by Akbar's victorious General Todar Mull, and concluded in 1591 by Raja Man Singh. The settlement of Akbar is given in the Ain-i-Abkari at 17 lakhs of rupees, and was continued till 1742, when the Mahrattas invaded the country. From 1751 Orissa became a Mahratta province under the management of Subadar. The Mahratta demands knew no limit; defaults in payment subjected the talukdar to dispossession, imprisonment and fine and when all other means failed, the Mahratta cavalry harried the country and plundered the villages. The talukdars in their turn, when pressed, retaliated on the people by levying extra-ordinary cesses. Along the sea coast and in the hilly regions on the west known as the Rajawara, the old organisation survived unaltered. This tract included the territories of some of the feudal chieftains who ruled over the barbarous races of the hills, and the lands assigned in the

settlements of 'Todar Mull and Raja Man Singh to the descendants of the Hindu kings. The Raja of Khurda had to buy peace from the Mahrattas by ceding to them some of his parganas, and many petty Rajas along the coast were reduced to the position of ordinary zamindars.

6. Such was the state of affairs when the British Commissioners in 1803 found themselves confronted with the necessity of making a settlement of revenue for the Province. In paragraphs 242 to 249 Mr. Maddox describes the history of the earlier settlements made by the British from 1803 to 1830, which, the Director of Land Records observes, "is an unfortunate record of assessment on insufficient enquiry and of the enforcement of inelastic rules for the realisation of inequitable revenues," and he shows incidentally how many an old Uriya family was ruined, and how the proprietorship of the land fell in many cases, into the hands of Bengali speculators. Between 1805 and 1820 the revenue rose fitfully from about 11 lakhs to 13½ lakhs, with but little justification for the increase in either the spread of cultivation or the circumstances of the people. From the year, 1820 to 1830 but little change appears to have been made in the revenue demand.

7. *Settlement of 1837*—The present prosperity of the province owes its origin to the great settlement of 1835-1845. Preparations for this settlement were commenced as early as 1830, and it was held to run from 1837, although the proceedings were not concluded till 1845. The procedure adopted at this settlement is fully described by Mr. Maddox in paragraphs 250 to 253 of his report. The operations cost upwards of 20 lakhs, and the result was an increase to the revenue of only Rs. 34,980. Attention is drawn to the knowledge, experience and sympathy exhibited by all the officers connected with the settlement, and particularly by Mr. Mills, Sir Henry Ricketts, and Mr. Wilkinson. The settlement was originally made for 30 years and expired in September 1867, but for two years previously the Province had suffered from the disastrous famine of the years 1865-66, and it was considered inexpedient to attempt a re-settlement until time had been allowed it for recovery. Accordingly that settlement was prolonged for another 30 years.

8. *Land Tenures*:—In Chapter XI of his report, Mr. Maddox has described the rights and liabilities of the various classes in occupation of the land, and shown how those rights have developed and changed during the nineteenth century, and how they may be affected by the present settlement and by actual or proposed alterations in the land laws. At the conquest of Orissa in 1803, the Commissioners appointed for the settlement of the Province found in possession a variety of proprietors and *quasi*-proprietors, whom the settlement Officer has enumerated and described. The rights of these very different classes were not identical, and none of them, except the zamindars and *khandaits* of the border, seem to have had before the British conquest any proprietary right.

In addition to the real zamindars who held proprietary rights under the Mahrattas and were borne on their revenue roll, the settlement of 1803 recognized many hereditary *mokuddums*, who had paid their revenue directly into the public treasury, and the holders of any considerable rent-free or quit-rent tenures, and various titles of *Chandhri*, *Kanungo* and *mcquddums* soon merged into the general proprietary titles of *Zamindar*. Under these zamindars again was recognised a class of subordinate proprietors or proprietary tenure-holders, paying their revenue through the zamindars of the estates within which their lands lay. With them may also be mentioned *lakhiraj bahaldars*, or holders of confirmed revenue-free lands, who possess a permanent right to hold their lands free of land revenue, and are independent of the zamindars of whose estates their lands originally formed a part, except in so far as they are bound under Act XI (B. C.) of 1880 to pay certain cesses through those zamindars.

The principal tenantry who held beneath the proprietors or proprietary tenure-holders mentioned above may be divided roughly into seven classes: (1) the *Tankidars*, or holders of small areas permanently assessed at a quit-rent; (2) the *Nisfi-bazyafidars*, or holders of resumed rent-free lands assessed for the term of the last settlement at half rates; (3) the *Kamil bazyafidars*, or holders of resumed rent-free lands assessed at the last settlement at full rates; (4) the *Thani*

raiylats, or resident cultivators, whose rents were fixed for the term of the settlement; (5) the *Chandina* raiylats, or holders of homestead lands, whose rents were also fixed for the term of the settlement, (6) the *Pahi* raiylats, or non-resident raiylats, who were practically, in most cases, tenants at-will; and (7) the holders of service and other jagirs who held their lands rent-free, either in consideration of services to be rendered, or as rewards for services in the past. Of these, of course far the most numerous and important are the *Thani* and *Pahi* raiylats, the resident and non-resident cultivators.

9. *The Settlement of 1837 Revenue*—The temporarily-settled areas were settled with about 8,000 proprietors in 3,571 estates, and the following table shows how the area of the temporarily-settled lands was dealt with, and how revenue was assessed on the estates comprised within them—

DISTRICT,	Total Area.	Cultivated Area.	Assessed Area.	Assets as found by Settlement Officer.	Revenue assessed by Settlement Officer.	
					Percentage of assets.	Amount.
	Acres.	Acres.	Acres.	Rs.		Rs.
Cuttack	1,174,900	697,000	621,000	11,21,000	64	7,14,100
Balasore	943,993	554,000	493,200	5,75,600	65	3,77,290
Puri	499,100	377,000	302,400	4,41,600	66	2,92,800
Total	2,617,993	1,628,000	1,416,600	21,38,200	65	13,84,190

These figures show that the incidence of revenue was Rs. 1-2-5 per assessed acre in Cuttack, As. 12-3 per acre in Balasore and As. 15-6 in Puri, or As. 15-7 for the whole Province, and that the balance of the assets left to the zamindars amounted to Rs. 4,06,900 in Cuttack, Rs. 1,93,310 in Balasore, Rs. 1,48,800 in Puri and Rs. 7,54,010 in the Province as a whole.

10. *Rents*—The following table shows how subordinate tenancies were treated at the last settlement:—

CLASS	CUTTACK				BALASORE				PURI				TOTAL			
	Area in acres.	Percentage of assessed area.	Rent.	Incidence per acre.	Area in acres.	Percentage of assessed area.	Rent.	Incidence per acre.	Area in acres.	Percentage of assessed area.	Rent.	Incidence per acre.	Area in acres.	Percentage of assessed area.	Rent.	Incidence per acre.
			Rs.	Rs. A. P.			Rs.	Rs. A. P.			Rs.	Rs. A. P.			Rs.	Rs. A. P.
Tankidars ..	500	.....	100	0 3 2	.....	.....	.....	.....	28,100	9.2	13,600	0 7 9	28,600	2.0	13,700	0 7 7
Nisfi-bazyafti ..	87,200	14.0	35,200	0 6 5	76,800	15.5	24,200	0 5 1	57,300	18.9	35,200	0 9 10	221,300	15.6	94,600	0 6 10
Kamil ..	37,700	6.0	34,000	0 14 5	37,100	7.5	28,100	0 12 1	5,800	1.9	6,700	1 2 6	80,600	5.7	68,800	0 12 5
Thani ..	133,700	21.5	3,78,700	2 13 3	107,100	21.7	1,85,000	1 11 8	96,900	32.2	2,01,600	2 1 4	337,700	23.8	7,65,300	2 4 8
Chandina ..	10,100	1.6	40,300	3 15 10	15,500	3.1	30,800	1 15 9	1,300	.4	6,900	5 4 11	26,900	1.8	78,000	2 14 4
Pahi ..	268,900	43.3	5,13,500	1 14 6	219,100	44.4	2,50,300	1 2 11	82,900	27.4	1,22,900	1 7 8	570,900	40.3	8,95,700	1 9 1
Jagir ..	22,730	3.6	.....	.....	15,230	3.0	.....	.....	6,850	2.9	.....	.....	49,910	3.3	.....	.....

From this it appears that Balasore was assessed lightly, the population being scanty, the soil poor, and the lands liable to flood and interspersed with considerable tracts of jungle. Puri, though also liable to floods, was more closely cultivated and a larger proportion of the area was held by resident tenants, for whom comparatively high rents were settled. Cuttack was then, as it is now, by far the most prosperous district, being less liable to flood, having a more fertile soil and being in a more advanced stage of civilisation. The rents of *pahi* rayats, which have always been more or less competition rents in Orissa, reflect with much accuracy the general conditions obtaining in each district, the incidence of such rents standing at Rs. 1-14-6 for Cuttack, Rs. 1-7-8 for Puri and Rs. 1-2-11 for Balasore.

11. *Changes During the Currency of the Past Settlement*:—During the 60 years of the currency of settlement of 1837, the province has developed in every direction; the population has increased by over 80 per cent., cultivation has extended by 30 per cent., communications have been largely improved, bringing an increase in the volume of trade and the prices of staple food-crops have trebled, securing largely increased profits to cultivators. This development has naturally been accompanied by an increase in the rents of the *pahi* rayats, the only class for whom rents were not fixed for the term of the settlement, and the figures given by Mr. Maddox show that the incidence of their rents advanced from Rs. 1-14-6 to Rs. 2-11-6 in Cuttack, from Rs. 1-2-11 to Rs. 1-11-1 in Balasore, and from Rs. 1-7-8 to Rs. 1-13-8 in Puri. On the other hand there has been a remarkable decrease in the area of the *thani* tenancies. These tenancies, as the holdings of resident tenants, naturally embraced all the best lands of the villages, and the customary privileges of the resident tenant included many important privileges. He had the right to take up waste land at privileged rate; he had rights of pasture and fuel; his occupancy was hereditary; his rent was fixed; and he could be disturbed only on failure to pay his rent. His rent was therefore much higher than that of the non-resident tenant. It was believed at the last settlement to be too high, notwithstanding all these advantages, but as a general rule the rents found to be actually paid were confirmed. The breakdown is attributed by Mr. Maddox to the famine years of 1835-36. The result was serious. The area under the *thani* tenure is now only 58 per cent. of what it was in 1837.

Among other changes which took place in the course of the last settlement was the multiplication of estates and of landlords, the number of estates rising from 3 571 to 6,377, and the number of individual landlords from 8,000 to 42,400. As might have been expected, the lands in the direct possession of the landlords increased proportionately, and the following figures show the increase in these lands, and in the valuation made of them, in the sixty years :—

DISTRICT.	LAST SETTLEMENT.		EXISTING.	
	Area	Valuation.	Area.	Valuation.
	Acres.	Rs.	Acres.	Rs.
Cuttack ...	42,300	75,400	85,800	2,23,200
Balasore ...	20,400	25,100	46,600	81,100
Puri ...	26,000	46,800	40,100	80,200
Total ...	88,700	1,47,300	172,500	3,84,500

12. *Present Settlement*.—The present settlement was commenced at the end of the year, 1889 and extended over a period of ten years. The essential questions connected with these operations are (1) the settlement of rents, and (2) the settlement of revenue. The proceedings undertaken for these purposes and their financial results are summarised below.

13. *Settlement of Rents.*—With regard to the important question of the settlement of rents, it appeared that the rents of very large number of tenants holding at privileged rents for the term of the settlement, had to be revised at the present settlement, while it was known that cultivation had largely extended during the same period, and that there were considerable areas in the possession of both landlords and tenants that had never been assessed to revenue or rent. In 1891, the lines were suggested on which rents were ultimately settled in Orissa for the important classes of tenants known as *pahi* and *thani* raiyats, although before they were finally adopted many experiments were made with the object of utilising the “prevailing rate” section of the Bengal Tenancy Act, in order to level up inadequate rents and to secure uniformity in the rents to be settled during the proceedings. After prolonged correspondence a set of rule was laid down, with the approval of the Government of India, for the guidance of officers in the settlement of rents. The general principles as regards *pahi* and *thani* raiyats were that the existing rents of *pahi* raiyats should, as a rule, be taken as fair and equitable, and that the rents of *thani* raiyats, if the *thani* rate was less than the village rate, should not ordinarily be enhanced by more than half the percentage of the difference between the two. The village rate was calculated on the basis of *pahi* rents, and *pahi*-rents, being competition rents, were thus accepted as the standard of the limit of enhancement.

14. *General Results of the Settlement of Rents.*—The aggregate effect of the working of the rules for the settlement of rent may be summarised in the following statement showing the enhancement of the assets effected by the Settlement Department in the course of the proceedings:—

DISTRICT.	Number of holdings.	Area.	Existing assets.	Settled assets.	Percentage of enhancement.	Incidence of settled assets per acre,		
		Acres.	Rs.	Rs.		Rs.	A.	P.
Cuttack	650,600	822,500	18,47,400	20,72,900	12	2	8	3
Balasore	370,290	692,200	9,88,800	11,51,400	16	1	10	7
Puri	204,400	373,300	5,73,700	6,43,300	12	1	11	7
Total	1,225,290	1,888,000	34,09,900	38,67,600	13	2	1	0

Of the total number of rents settled, Mr. Maddox estimates that in 54 per cent. the existing rents were retained; in 13 per cent. an enhancement was made on the ground of excess area; in 24 per cent. an enhancement was made on other grounds; while 3 per cent. were reduced for loss of area and 6 per cent. were tenancies newly assessed. The rent enhancement on the classes with which we are principally concerned is even more moderate than the table indicates. The increase on the tenants of the old *thani* holdings is only 6 per cent. The name of the *pahi* tenant now disappears from the settlement records. As a matter of fact, the *pahi* tenant of 60 years ago had ceased to be non-resident. He has settled down on his cultivation, and under the operation of the Bengal Tenancy Act, he has become an occupancy tenant with all the rights and privileges which that Act has given. Of the 1,888,000 acres in cultivation, 904,700 acres are held under this new right, and out of that great total there are only 23,100 acres held without a right of occupancy in some form or other (paragraph 512 of the report). There is no part of Bengal in which under the joint operation of law and record the protection of the tenant is more complete than it is now in Orissa. The enhancement of 13 per cent. which the table shows is in truth mainly due to an increase from Rs. 94,600 to Rs. 2,28,500 on the rentals of the class of tenants locally known as *nisfi bazyafidars*. These people, as has been before explained, were given

holdings for the term of settlement at what were supposed to be half rates. They turned out to have been really pepper-corn rents, and the rents, which have now been fixed, are not more than one rupee per acre, which is less than half the present market value of the land.

15. *Assessment of revenue* :—The Secretary of State in his Despatch No. 20 Rev., dated the 3rd February 1898, approved the proposal made by the Government of Bengal, and supported by the Government of India, that from 50 to 55 per cent. of the assets should be taken as revenue, at the same time directing that the limit of 55 per cent. should be very rarely exceeded. In the matter of the term of the settlement, the Secretary of State differed from both Governments in their recommendation of a 20-year settlement, and ordered that new settlement should be concluded for a term of 30 years. The actual percentage of the assets taken has been 54 per cent. Nearly 6,400 estates situated in 11,000 villages were assessed to revenue. The assessment was made for every individual estate by the Settlement Officer himself, and the proprietors, and the proprietors of only five estates refused to accept the assessment that has been made. The assessments have been carried out with great care and tact by Mr. Maddox, and the result has been a settlement fair to all parties, with an increased revenue that the Collectors find no difficulty in realising.

16. *Results of the settlement of revenue* :—The following statement shows the general results of the present settlement of revenue as compared with the existing state of affairs found by the Settlement Department :—

DISTRICT.		EXISTING REVENUE			SETTLED REVENUE	
		Existing assets.	Percentage of existing assets.	Amount.	Settled assets.	Percentage.
		Rs.		Rs.	Rs.	Rs.
Cuttack	....	18,47,400	38	7,14,100	20,72,900	53
Balasore	....	9,88,800	38	3,77,290	11,51,400	55
Puri	....	5,73,700	51	2,92,800	6,43,300	58
Total	....	34,09,900	41	13,84,190	38,67,600	54

In Puri two-fifths of the revenue is paid by two estates, in which the incidence of the new assessment is 60 per cent. of the revised assets, but the effect is to reduce the proprietors' income by only 5 per cent. (paragraph 555 of the report).

The increase in revenue as shown in the above table amounts to 54 per cent. in Cuttack, 67 per cent. in Balasore and 28 per cent. in Puri, or 52 per cent. for Orissa as a whole. The incidence of the new revenue is compared with the incidence of revenue at the last settlement in the table below :—

DISTRICT.	ASSESSED AREA.		REVENUE		INCIDENCE.		
	Last settlement.	Present settlement.	Last settlement.	Present settlement.	Last settlement.	Present settlement.	
	Acres.	Acres.	Rs.	Rs.	Rs. A. P.	Rs. A. P.	
Cuttack		621,000	822,500	7,14,100	10,99,300	1 2 5	1 5 5
Balasore		493,200	692,200	3,77,290	6,29,073	0 12 3	0 14 6
Puri		302,400	373,300	2,92,800	3,76,700	0 15 6	1 0 2
Total		1,416,600	1,888,000	13,84,190	21,05,073	0 15 7	1 1 10

The result of the present settlement on the incomes of the zamindars is summarised below :—

DISTRICT.	Income before settlement.	Income after settlement.	Percentage of reduction.
	Rs.	Rs.	
Cuttack	11,33,300	9,73,600	14
Balasore	6,11,510	5,22,327	14
Puri	2,80,900	2,66,600	5
Total	20,25,710	17,62,584	13

In other words, whereas the zamindars received an income of Rs. 7,54,010 at the time of the last settlement, they will now receive an income of Rs. 17,62,584, so that while the revenue has been enhanced by 52 per cent. since the last settlement, the income of the zamindars has increased by 133 per cent. Wherever the rise in revenue has been large, the enhancement has been graduated over periods extending to ten years (paragraph 481 of report).

The following statement shows the results of the settlement of revenue upon the incomes of the proprietary tenure-holders, the class that was bound to suffer most on the occasion of the re-settlement of the revenue. The enhancements have been softened in almost all cases by *rasadi* allowances :—

DISTRICT.	Existing income.	SETTLED.			Percentage of reduction of income
		Assets.	Revenue.	Balance.	
	Rs.	Rs.	Rs.	Rs.	
Cuttack	1,01,693	2,38,902	1,62,284	76,618	25
Balasore	49,672	1,19,435	85,804	33,631	32
Puri	96,332	2,92,530	2,23,981	68,549	29
Total	2,47,697	6,50,867	4,72,069	1,78,798	28

17. There are certain points raised by Mr. Maddox on which definite orders are required from Government. Concerning the procedure to be adopted at the next settlement, it is useful to have on record Mr. Maddox's suggestions, but it is impossible to bind the Government of thirty years hence by any decision at present. As for the powers to reduce rent, mentioned in paragraph 456 there is nothing to prevent an application for such powers being made in the course of any proceedings under Chapter X of the Bengal Tenancy Act, if such be thought necessary. The following matters are being dealt with separately, the maintenance of the records, the transfer of raiyati holdings, the extension of the remaining portions of the Tenancy Act, the maintenance of the East Coast Canal, the imposition of an owner's water-rate, the management of the embankments, the recovery of rent from proprietary tenure-holders, rent and revenue instalments, inspection of grazing, land cremation grounds, *Jalpai* lands in Balasore, preparation of an abstract to the khasra. On the first and most important of all these questions a report has been made to the Government of India, and several of the other matters have been disposed of; but the Lieutenant-Government does not wait for a complete settlement of these subsidiary matters before submitting for the orders of the Government of India the results of the Settlement Officer's revision of the revenue assessment.

18. *Cost* :—The cost incurred in these proceedings is dealt with in Chapter XXV of the report. The total expenditure, with some necessary adjustments of the survey charge, amounted to Rs. 30,60,100. The total area dealt with was 4,797

square miles, excluding Khurda, the ekhrajats and killas Aul, Darpan and Madhupur. The rate per square mile aggregated Rs. 766 in Cuttack, Rs. 475 in Balasore, and Rs. 618 in Puri.

19. *Merits of Officers.*—With regard to the merits of the officers employed on the survey and settlement of Orissa, the Board record their remarks as follows :—

“It only remains for the Board to cordially and gratefully endorse the acknowledgements of the Settlement Officer and of the Director of Land Records of the services of the officers employed in the survey and settlement operations, which are set out in detail in paragraphs 364 to 374 of the Final Report, and in paragraph 39 of Mr. Lyon's Review thereof. It is impossible for the Board to appreciate these services too highly. Colonel Sandeman's co-operation and assistance were invaluable to the Settlement Officers, and have been suitably acknowledged by the Director. Mr. Maddox's services are, in the Board's opinion, deserving of some special form of acknowledgement. Mr. Lyon has, with becoming modesty, omitted any mention of his own services, but Mr. Toynbee wishes to place on record his own appreciation of the energy, ability, and tact displayed by him, and of the great and loyal assistance he has given him in the discussion and disposal of all the Orissa Settlement questions which have come before the Board for disposal during the term of his tenure of office. Mr. W. C. Macpherson's connection (as Director of Land Records) with the Orissa Settlement ceased before Mr. Toynbee became a Member of the Board, but as Commissioner of Orissa as well as in the Board he had fully opportunity of appreciating the zeal, energy and ability which for nearly five years Mr. Macpherson devoted to the work of the Orissa Settlement in its earlier stages”.

The Lieutenant-Governor agrees with the Board in their just appreciation of the services of the officers referred to in this extract. The high quality of the work performed by the officers employed in these proceedings is evident from the fact that although rents were assessed from nearly one and-a-half millions of tenants, there were only 295 appeals, and although 42,000 proprietary estates were assessed, there were only five objections. This result is honourable testimony to the great patience, judgement and ability with which Mr. Maddox discharged very prolonged and onerous duties.

The excellent assistance given by Mr. McPherson in Puri, Mr. Webster in Cuttack, and Mr. Kingsford in Balasore, has been suitably acknowledged by the Settlement Officer and the Director of Land Records. Amongst the Deputy Collectors, Mr. James Taylor is specially mentioned: his good work in the Khurda Settlement has already been acknowledged by Government.

For the good work done by them, the following officers have been promoted to the rank of Deputy Magistrate and Deputy Collector :—Babu Jogendro Narain Mitra, Babu Abhoy Prosad Das and Babu Hara Krishna Mahanti. The names of the other officers commended for good work by the Board will be communicated to the Appointment Department.

20. The proceedings are now submitted to the Government of India for confirmation under Rule 5, clause V, Chapter 16, Part III, page 118 of the Settlement Manual, 1900.

By order of the Lieutenant-Governor of Bengal.

F. A. SLACKE,
*Secretary to the Government of
Bengal.*

No. 264 T.-S., dated Darjeeling the 8th July 1900

From—P. C. Lyon, Esq., I. C. S., Director of Land Records and
Agriculture, Bengal,

To—To The Secretary to the Board of Revenue, L. P.

I HAVE the honour to forward herewith, in original, for the orders of the Board, the review written by the present Commissioner of Orissa, Mr. E. B. Harris, i.c.s., of the Final Report on the Settlement of Orissa.

2. In paragraphs 12, 13 and 14 Mr. Harris deals with the question of the imposition of an owner's rate upon canal-irrigated lands. I propose to consider the remarks made in these paragraphs when submitting the separate report which is due to Government upon this subject.

3. My own review of the Final Report is now in the Press, and will be submitted to the Board at an early date.

4. I beg that copies of the Commissioner's review may be forwarded to me for record as soon as it has been printed.

No. 351—O. S., dated Cuttack, the 3rd July 1900.

From—E. B. HARRIS, Esq., I. C. S., Commissioner of the Orissa
Division,

To—The Director of the Department of Land Records and Agriculture,
Bengal.

WITH reference to your letter No. 810S. dated the 9th April 1900, inviting remarks on Mr. Maddox's report on the Settlement of the Province of Orissa, I have the honour to make the following observations. Reports from the District Officers have not been received yet. I do not, however, defer my review on that account, as I propose to deal in this report with the general features of the Province and not with the peculiarities of any district. As a matter of fact, such peculiarities are not many in number. The District Officer's remarks will be forwarded to you after receipt.

2. The report consists of 25 chapters and of 626 paragraphs, that divide themselves under six principal Parts : Part I deals with statistical matter ; Part II with matters economical ; Part III gives an account of the early history and land-tenures of the Province ; Part IV shows the different stages of the settlement procedure, and is interesting not only on account of the different rules of procedure, but specially as a record showing how a complete set of rules was evolved for the work, which was originally started only with general instructions ; Part V sets forth the results of the settlement on areas, rents and the revenue ; Part VI gives an account of the expenditure and to make the report complete as a provincial record, an account of the revenue-free lands and of the temporarily and permanently-settled estates in the Province has been added to this portion.

Volume II of the report contains the appendices, where we are given several useful statistical statements as well as a reprint of important correspondence. Mr. Kingsford's report on Balasore and Mr. H. McPherson's report on Puri, reprinted in this volume, form a useful contribution to the literature on the Settlement of Orissa.

3. In the volumes of report under review, dealing with so many subjects bearing on points of principle as well as of detail, selection is somewhat difficult for the purposes of review, which must be necessarily brief. I propose, therefore, in this review to deal only with a few of those subjects that are generally of administrative importance, as well as with the results of the settlement, and offer a few remarks upon the manner in which the work has been done.

4. *Parts I and II—Economical and Statistical*—It will be convenient to review these parts together, as the statistical matters in the report bear a close relation to the economical condition of the country.

I shall first take notice of the magnitude of the task before the Settlement Officer. He has prepared a record-of-rights for an area aggregating five thousand square miles in the Province. The number of holdings in this area amounts to about a million and-a-half, and for every one of these his officers have ascertained the status, rents and other incidents. The Settlement Department had to settle fair rents for about a million and a quarter of the revenue-paying holdings. The plots exceed eight millions.

Creditable as it is in itself, the above account does not exhaust the amount of work done by the Department. The revenue settlement work has involved a considerable amount of labour. The statistics of the assests of 6,346 estates in the temporarily-settled area have been tabulated according to the tenancies in each estate, and a comparison has been made for each estate with the statistics of areas and assests of the different kinds of tenancies in the last settlement. The statistical and economical conditions of each estate has been reviewed by the Assistant Settlement Officers in reports the manner and matter of which have elicited the approval of the Board. Every one of the Assistant Settlement Officers' reports on revenue settlement was considered by the Covenanted Assistant in charge of the districts, and was submitted with their remarks to the Settlement Officer, who in his turn considered them carefully and submitted them to this office under the Confirmation Rules. Those estates that require the Board's orders have been submitted to the Board by Messrs. Cooke, Stevenson, Marindin, and myself. I shall notice hereafter in greater detail the result of the rent and revenue settlement work. It will suffice for the present to observe that the magnitude

of the work done, both in its comprehensiveness and multiplicity of details, demanded in the Settlement Officer the best capacity for organisation and mastery of details. The rent and revenue settlement operations have imparted to the work elements of peculiarity that are not to be found in anything like the same extent in the operations in Bihar.

5. *Extension of Cultivation*—In considering the material condition of the country, the statistics of extension of cultivation furnish some of the most useful data bearing upon this important question. Fortunately for this Province, reliable statistics of the extent of cultivated area are available for the last settlement and, so far as the temporarily settled area is concerned, there is no necessity of proceeding on uncertain grounds. In speaking of this subject in paragraph 505 of his Report, Mr. Maddox remarks upon the uncertain statistics in regard to the areas outside the temporarily-settled estates. But as the temporarily-settled estates comprise the major portion of the Province, the comparative statistics of their assessed and unassessed areas appear to give by far the most valuable index of the development of cultivation.

Taking next the figures of the settlement as given in the Appendices DA, DB, and DC, I find that in Cuttack cultivation has extended 32 per cent., in Balasore 23 per cent., and in Puri 40 per cent., and throughout the Division there has been in the aggregate an extension of about 33-1/3 per cent. The newly cultivated area exceeds five hundred thousand acres, and the variety in the percentages in the different districts is the result of a slow but steady process of selection that has for ages been in operation among the agricultural classes in Orissa. Although the growing needs of the population has given an impetus to the extension of cultivation over the waste lands of the last settlement, the selection has been regulated by the quality of the land as well as by its proximity to the populous villages. The cyclone of 1831-32 had thrown a great deal of good land out of cultivation and depopulated many prosperous villages in the seaside pragnas of the Balasore district. In discussing the economical condition of the parganas Banchas over the writers of the *ruidads* (Settlement Reports) of taluks Mobarakpur, Kaida and Arang had laid the greatest stress at the last settlement on the havoc caused by the cyclone. But in course of the last sixty years the largest extension of cultivation has absorbed much of the waste in Balasore, and in the other districts such a large percentage could not be attained only because the margin of culturable waste was comparatively narrower in the latter.

6. *Analysis of cropped areas*—Although the statistics of extension of cultivation furnish satisfactory evidence of the steady increase of the prosperity of the Province, we may push our enquiries a little further and see what varieties of principal crops are grown by the agricultural classes in the Division, as these statistics may give an insight into the material condition and the staying power of the agricultural classes in this Province.

Appendix F of the report gives crop statistics for the Division. The most remarkable point in the statistics is that out of 2 million 498 thousand acres net cropped area, only 196 thousand acres are cropped more than once; that is to say, less than 9 per cent of the area yield more crops than one.

The statistics of classes of crops are still more interesting. Only 337 acres produce wheat, 557 acres grow barley, 42,000 acres produce mandia, which is a very cheap crop, 235 thousand acres have been shown under other food-grains including pulses. I would only add here that most of this area will be found to grow *biri*, *kulthi* and similar cheap stuff: *mung*, gram and other profitable crops are very rare in the Division; even the area under *arhar* will be found to be extremely small. It is necessary to add this remark because, as a matter of fact, most part of the 235 thousand acres under other food-grains produce food-stuffs that are often cheaper than rice, and though, in times of scarcity, they afford sustenance to the people, they do not contribute largely to the people's wealth.

The area under oil-seeds amounts in the aggregate to about 12 thousand acres, and that under sugarcane is only 17 hundred acres in the three districts put together. Jute claims a small area of only 933 acres, and cotton receives hardly much better attention on the 2 thousand acres devoted to this crop.

Pan (betel leaves) is grown on only 499 acres, and *inkar* grass, which is used wholly in *pan* cultivation, occupies 71 acres. This cultivation is, under the caste rules, a monopoly of a special caste, namely, the *Barojis*, who are emigrants from the Bengal *Baruis*. It does not give any profit to the mass of the peasantry.

The above exhaust the principal special crops. Poor as is the list in itself, closer scrutiny of the statistical table shows that the above crops are grown chiefly in Cuttack and Puri districts. Balasore comes in for a very small share. To notice a prominent case, it will be seen that out of 235 thousand acres shown as growing pulses only 8 thousand belong to Balasore. The statistics show that the cultivating classes of all the districts are practically dependent upon the rice crop, and that this remark is pre-eminently true of Balasore.

Rice is the crop upon which the agricultural classes in the Province depend for their existence. Nearly two millions of acres are under winter rice, 167 thousand acres grow early rice and only 36 thousand, mostly lying in three thanas, are appropriated to spring rice.

The statistics speak for themselves and call for no comment. They show, in the absence of a second crop, how vast is the disaster if the winter rice crop seriously fails. Only 194 thousand acres or less than a tenth part of the area, are irrigated.

7. *Prices and communications*—Although the preceding analysis of the cropped area shows that the condition of the agricultural classes is not quite secure, yet there can be no doubt that, owing to improvements in communications and rise in prices of the field produce, the agriculturists as a class are now in a much better position than their ancestors of the last settlement.

At the time of the last settlement, the procedure of the country had no access to the markets outside the districts. Even in the same district there was very little trade between markets remote

from each other. There were very few roads within the district, and the so-called roads were little better than primitive footpaths. The Jagannath road and the road to the Madras Presidency were the principal trade routes and pilgrim routes. Under these conditions trade was naturally confined within the narrow limits imposed by the small carrying capacity of the country carts and pack-bullocks.

The famine of 1866 and the inquiries that followed taught the authorities the imperative necessity of bringing the trade of the country in close touch with other parts. The vigorous measures that have since been adopted in opening up roads and canals have been fruitful of the greatest benefit to the country. The opening up of the ports at Chandabali, False Point, and Balasore, and the improved facilities of canal communication with the first two ports, have created a market for produce, and have brought into existence foreign trade, with its agencies and sub-agencies, in the mufassal, through the influence of which the prices in the remote mufassal now rise and fall in close sympathy with the foreign market.

In illustration of the above remarks, the following abstract of average prices of common rice in decennial periods may be interesting :—

Period	Average price
1837—1846	... Srs. 43.20 and 48.14 seers, excluding 1837 and 1840, abnormal years.
1847—1856	.. 57.94
1857—1866	.. 28.58
1867—1876	.. 26.87
1877—1886	.. 21.26
1887—1896	.. 18.28

It is a common saying among the cultivators that the high prices that commenced during the famine have never left the land. But the statistics given in paragraph 164 of the report show that the 9 seers of 1866 were followed by 16 seers in 1867 and by 31 seers in the following year. The decennial period of 1867 to 1876 was also a period of great activity in the improvement of roads and water courses and of gradual development of foreign trade. The steady rise of prices set in after this transition period. The new railway has just taken the field as a great rival of the steamship companies, which have been the carriers of the produce.

It is too early to say how prices will be affected under the altered conditions. But it must be admitted that by creating a market for his produce, the steamships have rendered a splendid service to the cultivator in the past.

8. *Population—its growth*—The statistics show a steady growth of the population of the Province. Statistics are available from 1842, and although the statistics of the earlier period cannot claim very great accuracy, there cannot be much doubt about their approximate correctness for the purpose of giving a general idea in regard to this question. Taking, therefore, the statistics of the different periods, I find—

Year	Population
1843	.. Two and a half millions
1865	.. Three millions
1867	.. Two and a half millions (estimate)
1872	.. Three millions
1881	.. Three millions and six hundred thousands
1891	.. Three millions and eight hundred thousands
Present day	.. Four millions and two hundred thousands (estimate).

(Vide paragraph 198 of the Report)

The temporary check received at the famine of 1866 has disappeared, and, with the improvement of sanitation and under the influence of natural causes, the estimated population of the present day shows an increase of about 68 per cent. Over the figures of 1843 following the last settlement.

After making due allowance for extension of cultivation and other improved conditions of existence, these statistics force on our attention the fact that the amount of land and agricultural produce available for the support of each individual has been reduced in the ratio of 100 to 79. The significance of these figures cannot be overlooked, when it is borne in mind that the bulk of the people depend, directly or indirectly, upon agriculture for their daily bread, that arts and industries, except in the most primitive forms, are unknown in the Province, and that only a very small margin remains for future extension of cultivation.

I think that the Settlement Officer very rightly remarks that we have approached the stage at which “either the increase of population must be checked or the pressure relieved by emigration or the standard of comfort reduced to a dangerously low level”.

Check over the increase of population is impracticable. With an essentially conservative and home-loving people like the Uriyas, the question of emigration lies beyond the scope of practical politics. The growth of population will therefore encroach upon the people's standard of comfort and will impel the people to devise their own remedy. The problem presents itself in a greater or less degree in all countries, and the difficulties are by no means peculiar to this Province.

9. *Prospects of further extension of cultivation*—The preceding remarks bring me to consider what margin of waste is still available to the people for cultivation. The milan-khasra statistics given in Appendix E of the report give the necessary information on this point.

It appears that in the Division 348 thousand acres of culturable waste exist in the temporarily-settled area surveyed in this settlement including the revenue-free holdings. This area includes 67 thousand acres old fallow, 132 thousand new fallow and 144 thousand culturable jungle.

Large as it looks on paper, the area of culturable waste sinks into insignificance when placed at the side of the 2,498,000 acres that are already cultivated. It forms only 9 per cent. of the total area. This represents the extent in regard to which we can make a safe forecast of further extension of cultivation. The above figures include Khurda subdivision. Omitting this the culturable area would be about 6 per cent., as shown in paragraph 506 of the Report.

It is only fair to add that in the above appendix in column 27 an area of 612,550 acres has been shown as unculturable waste. It is a matter of opinion what waste is culturable and what is not. It is quite possible that in classifying areas under these two heads the survey amins made some mistakes. Such mistakes are found in the last settlement papers, and in some estates cultivation appears to have extended beyond the margin of culturable area (*lac paria*) left at the old survey papers. It is to be hoped that a substantial portion of this unculturable waste will be available for cultivation in the future. It should be remembered that about 112 thousand acres of this area have been reserved for grazing purposes and cremation grounds (Appendix L of Report) over which cultivation cannot extend. A large part of the unculturable waste includes hillocks, sand, etc., which will probably never come under cultivation. Deducting these it is not likely that a large balance will be left for the peasantry to make experiments for cultivation.

A remarkable point that appears on detail examination of the statistics is that the culturable waste lies very unequally distributed in the different thanas. For instance, in thanas Tirtol, Salepur, Kendrapara, and Patamundai, the culturable area is insignificant in comparison with their total area. This becomes more prominent when village statistics are considered. In some villages it will be found that there is no culturable waste at all. In these places the people will feel soonest the necessity of emigration when the field produce is found insufficient for the increased demands of an overgrown family. These results are in fact, already in operation and account for the number of able-bodied daylabourers in certain villages. These people very wisely go out to seek service in Calcutta and other places. Those who are home-loving seek employment in neighbouring villages. In Balasore there is an annual exodus of gangs of field labourers who go out for the harvest to Contai Subdivision as well as to the Sundarbans. They return with handsome earnings after three or four months work.

10. *Material condition of the raiyats* :—The remarks made in the preceding paragraphs have anticipated much that might be said on the material condition of the peasantry.

The people are very simple in their habits, their wants are few, and they are content if these are satisfied in a moderate degree. Habitually law-abiding, they do not commit serious crimes by instinct, and even in times of distress serious offences against property are fewer than in many other places.

The Settlement Officer reports that it is the general opinion of the best informed officers of his department that about 80 per cent. of the rural population are more or less permanently indebted to the mahajan, proprietary tenure-holder or zamindar. Statistics on the point are not available, but one is inclined to pause when he reads this statement in the light of the registration statistics and statistics of money suits before the Civil Courts. I should expect that extensive monetary transactions of this nature should lead largely to registration of securities and will put in a considerable amount of work in the Civil Courts. The registration offices in Orissa are neither too many nor overworked in comparison with Bengal. The same remark applies in regard to the Civil Courts as well. Of course here as elsewhere many transactions take place without the execution of formal securities, and many cases do not come before the Courts at all. But debtors as well as their creditors have mostly emerged from the condition of pristine simplicity, and appreciate their mutual strength and weakness if the causes are carried before Law Courts. If the condition of the people were really so bad as reported by the Settlement Officer, I would expect to find it reflected more largely in the returns of the Registration Offices and of the Civil Courts. There can be no doubt about the indebtedness of the raiyat, but probably matters are not so bad as to make 80 per cent. of the raiyats indebted permanently.

No remarks are necessary on the interesting statistics on the general wealth of the country and the details of income and expenditure of the agricultural classes. They bear testimony to the earnestness with which the Settlement Officer and his assistants approached their task, but in the absence of statistics of wages earned (*vide* end of paragraph 185 of Report), as well as of statistics of former balances of wealth in circulation it cannot be said that all the necessary data have been taken into account in forming the estimate. The estimate is a rough one and has a usefulness of its own.

It is gratifying to find the following conclusion of the Settlement Officer on the position of the agricultural population :—

“In spite of their indebtedness and of the liability of the crops to injury by extremes of drought and flood, it is still the case as it was 30 years ago that in times of real scarcity the agricultural classes have more resources than any other” (paragraph 192 of the Report).

11. *Irrigation*—Paragraph 198 of the Report gives statistics of irrigated area for the last 30 years from 1869-70 to 1898-99. As I have elsewhere remarked, there is no canal irrigation in Puri district and only a small area in Balasore enjoys the benefits of canal water from Range III of the High Level Canal.

In Balasore the highest irrigated area was attained in 1879-80, which shows 51,000 acres, but this dropped the next year to 1,800 acres. Omitting this abnormal year, the highest area may be taken at 39,000 acres in Balasore. This together with the irrigated area commanded by the different canals in Cuttack, gives about 2,00,000 of acres as the highest irrigated area for the Province. Set against 2 lakhs of acres cultivated area in the Province, the result is that the benefit of the canal water is enjoyed by about a tenth part of the land.

12. *Its effect on incidence of rent*—Paragraph 111 of the Report examines the available statistics on this point. One remark that I should make at the outset is that, in order to say definitely whether rent rates have been raised by the zamindars in consequence of canal irrigation, comparison should be made with the rent, rates prevailing immediately before the advent of canal water. Comparison of the existing rent rates with the last settlement rates does not supplant the necessity of comparison is made with the rates that existed just before the introduction of water. Between the last settlement and the introduction of irrigation 30 years elapsed in almost all places, and in many places a longer period of time intervened. In the course of this long interval of time various causes must have operated in varying degrees to disturb the rent rates, especially the pahi rent rates which the zamindars could and did enhance. Again, as comparison is made with the average rates, the extension of cultivation might have disturbed the previous average. For all these reasons it seems desirable that comparison should have been made with the incidence prevailing in the different areas before the introduction of the canal water. In the statistics examined in paragraph 111, there is no mention of the incidence just before irrigation was introduced. I think that, in the absence of definite information on this point, no conclusion can be safely drawn in regard to the effect of irrigation on the rent incidence. I understand that Mr. W. C. Macpherson's proposals, based on this principle, were approved by the Board and by Government in 1895, when instructions were drawn up regarding the procedure of the enquiry.

I may further remark that, to find out the effect of irrigation on the incidence of rent the villages that are to be selected as "irrigated" should have a substantial area under irrigation. Supposing that the rates were enhanced by the zamindar on the irrigated land the statistics will not show appreciable increase of the incidence in villages or parganas having only, 10, 15, 20 or even 30 per cent. irrigated area. The preponderance of non-irrigated area in such villages will absorb a considerable part of the increase when the averages are worked out. I understand that Mr. W. C. Macpherson, in his instructions of 1895 laid down that villages having "substantial" areas under irrigation should only be selected. This appears to be necessary. The statistics show that parganas having 4 per cent. area under irrigation have been called "irrigated" and selected for comparison. Applying this test to the group, many of the parganas will have to be eliminated from the list.

To see next whether in the irrigated parganas there has been any uniformly higher increase of incidence. I find, as a matter of fact, that rent rates have risen in both classes, irrigated and non-irrigated parganas, and there does not appear to have been uniformly higher increase in the irrigated than in the non-irrigated parganas. This fact will be further clear if the comparison is extended to other parts of the district, and the statistics be read in the light of comparative statistics of incidence given in Appendix E. A. to E. C. in the Report.

On the whole the statistics are inconclusive. I think this opinion substantially agrees with the general drift of the Settlement Officer's observations in paragraph 117.

13. *Effect of irrigation on collections* :—The Settlement Officer and his assistants are unanimous in holding that protection and irrigation have greatly improved collections. The extent of the improvement requires to be ascertained in the imposition of any cesses or rates is under contemplation. The Settlement Officer, in paragraph 114, gives certain percentages of collections for certain tracts. It does not appear clearly on what facts these high statistics are based, and it is remarkable that some of them compare favourably even with the percentages attained in estates under the Court of Words. I have in paragraph 30 made a few remarks on the collections, and while agreeing that the collections are generally good, I am not sure that the high percentages reported by the Settlement Officer's assistants have been arrived at after a sufficiently comprehensive enquiry : they appear to be based on the statistics of only a few estates in Cuttack. The statistics for Puri require closer scrutiny, and for Balasore this statistics are not forthcoming on this point.

14. *Proposed cess* :—This brings me to the consideration of the Settlement Officer's proposal in paragraph 118 of the Report. He submits proposals for a 5 per cent. rate on all protected estates. He has no objection to cess at 8 annas per acre on all lands protected by embankments. He recommends a rate of 4 annas to the acre on all permanently settled estates protected by embankments. I have considered his remarks both on the subjects of irrigation and embankments. In paragraph 117 (4), he says that 3 annas to the rupee may be assumed to have been added, to the profits in consequence of canal embankments. It does not appear from what statistical data came to this conclusion.

Again in sub-paragraph (6) of paragraph 117 he says that irrigation and protection combined have caused a difference from 5 to 10 per cent., or say 4 annas per acre on zamindar's collection. I do not see in the Report sufficient statistics to bear out this conclusion.

I shall, therefore, only observe that if it be the intention of Government to impose the cess recommended by the Settlement Officer, further inquiry should be made on this point, and I hope that the local officers will be consulted. The zamindars who will have to pay the cess ought to be given a hearing. I reserve my opinion on the question, and have nothing for the present to say in regard to the proposed cess, except that sufficient statistics necessary to form a decisive opinion are not forthcoming in the report under review.

15. *Grazing reserves*—At this settlement it has been thought advisable, with the zamindar's consent, to reserve selected areas for the purpose of grazing pastures for the cattle. Cremation grounds have also been similarly reserved. The plots so reserved have been specified in the Kabuliyats of the zamindar, and the land lords have been given undertakings to reserve them for the purposes for which they are intended.

The grazing reserve area comes to 106,248 acres for the province and 7,469 acres have been reserved in province as cremation ground. Detailed statistics on the subject are given in Appendix L of this report.

16. *Part—III—History and Land Tenures—Chapters IX, X, XI*—Chapter IX consists of matters of antiquity and calls for no remarks. Chapter X deals with the early revenue settlements and matters of history that have been fully dealt with in Mr. Tonybee's history. In chapter XI the Report gives a history of the origin and deals with the incidents of the various kinds of land tenures in the Province. Mr. Toynbee's history contains the early literature on this subject. The reports of Mr. Fiddian and Babus Nandkishore Das and Rang Lal Banarjee gives full particulars for the three districts. No remarks appear to be necessary in this review on the origin and incidents of the tenures but I will only add that the report not only places in possession of the public carefully selected extracts from the opinion of the earlier authorities that were not accessible to the public and were being forgotten by the officers, but it adds to the value of these opinions by examining them in the light of the modern facts. This chapter on the land tenures shows a mastery of the ancient literatures on the subject, and will be very useful to our Revenue and Judicial officials and will, no doubt, be highly appreciated by the Bar.

I will not discuss these historical matters, but simply notice the present position of some of the principal classes having interest on the soil.

17. *Middlemen*—Fortunately for the country, the chain of middlemen between Government and the cultivator is not very long. In most of the estates only the zamindar intervenes between Government and the rayat. In the estates where there are proprietary tenures, such as Makaddams, Sarbarakars, Padhans or Kharidadars, one or other of these tenure-holders, intervene besides the zamindar. But by a wholesome arrangement in existence since the last settlement, the allowance that might have been given to the proprietor alone is only divided between the zamindars and the tenure-holder in certain fixed proportions. The rents of the rayat is fixed by the Settlement authorities, and the interposition of middlemen cannot be made to the rayats' disadvantage. The various grades of sub-infeudation inevitable under the Patni Regulations of Bengal do not exist in Orissa, where even big tenure-holders created by zamindars for reclamation and similar purposes are comparatively few. This favourable state of things is due to the solicitude shown towards the rayats at the last settlement, and the traditions of the country are also in the rayats' favour in this respect.

18. *Zamindars*—Paragraph 269 of the Report classifies the zamindari estates in the temporarily settled area. They are 6,346 in number, including 23 khas mahals: In Cuttack estates with Government revenue from Rs. 11 to Rs. 50 form the majority. In Balasore estates are not so small, and the majority of them pay Government revenue from Rs. 100 to Rs. 1,000. The same remarks applies to Puri. Taking average areas, the average size of the estates is 263 acres in Cuttack, 1,079 acres in Puri, and 678 acres in Balasore.

(i) *Divisions*—During the last 60 years division of proprietary right has gone onto an enormous extent on account of inheritance and sale. In Cuttack the number of recorded proprietors has risen from 5,400 to 31,900 since last settlement, and Balasore the rise is from 1,500 to 7,500. In Puri only 485 estates are now owned by 3,000 persons the number of owners at the last settlement is not ascertainable for this district.

(ii) *Transfers*—The statistics of transfer given in paragraph 272 are very useful. In discussing the statistics, the Settlement Officer remarks that estates and shares of estates to the value of over Rs. 55,000 are annually sold in Cuttack, and to Rs. 1,05,000 sold in Balasore, and to Rs. 7,000 only in Puri.

The high price in Balasore in comparison with Cuttack is rather abnormal. It appears, however from the note (a) in the statistical table of paragraph 272 of the Report that in Cuttack the purchase-money was Rs. 3,28,625 only for two years. This gives an annual average of Rs. 1,64,312, against Rs. 1,05,000 for Balasore, and there is really no abnormal increase in Balasore. The low figures for Puri are due to the small number of temporarily-settled estates in Puri.

Considering next the number of sales, the statistics give no reason to apprehend that sales are abnormally frequent, and it is remarkable that the majority of the purchasers are of the land-holding class.

19. *Working of revenue sale laws*—The statistics of the revenue sales from 1845, given in paragraph 275, furnish the most valuable evidence of the working of the last settlement, and suggest what are the prospects of the new settlement.

In discussing these statistics, I shall first consider the period ending 1865 when the first 30 year's term originally given expired, and then consider the extension of 30 years. Taking, therefore, the period ending 1865, I find that only 34 estates with an aggregate revenue of Rs. 12,000 were sold in Cuttack, 7 estates with a revenue of Rs. 3,000 were sold in Puri, and in Balasore from 1842 to 1868 only 29 estates were sold. In course of the 33 years from 1866 to 1899 there were altogether 251 sales with a revenue of Rs. 30,000, which gives an annual average of about eight sales with a revenue of less than Rs. 1,000.

The statistics of Puri for 1886 to 1895 are quite abnormal. The sale of the Kotdesh estate, which used to pay over Rs. 80,000 as Government revenue, has swelled the statistics. The circumstances that brought this estate to sale were quite exceptional. On the whole, the condition of things in Puri was no worse than in Cuttack.

In Balasore, during 30 years from 1869 to 1899, only 47 estates, with a revenue of Rs. 6,000, were sold. This gives an annual average of one and a half estate sold with Government revenue of Rs. 200.

These statistics are very satisfactory, and they furnish conclusive evidence of the great moderation with which the sale laws have been worked. The statistics for the decennial period of 1866 to 1875 following the great famine show how quickly the country recovered from the effects of the great disaster. It does not appear that sales were abnormally large during the decennial period, and I think that this fact furnishes reason to think that the famine did not permanently cripple the landlords' or the tenants' resources. Of course, during the early years after the famine sales were kept down by the great forbearance of the Revenue authorities, but the recuperative power of the country materially contributed to the solvency of the landlords and of their tenants.

The lessons taught by these statistics in regard to the capacity of the zamindars and the increase allowances given to the zamindars at this settlement furnish reasons to hope that the new settlement will be as successful as its predecessor.

20. *Dispossession of old proprietors*—It is satisfactory to find that since 1830 very few estates in the Division have passed into the hands of aliens, and that several of the alien proprietors have become practically naturalised in Orissa.

It is remarkable that in paragraph 274 of his Report Mr. Maddox is decisively of the opinion that the estates of the big Bangali proprietors are the best managed in the division. He says "It is the fashion to decry the Bengali zamindars ; but however much we may deplore the ruin of old families". (there were really very few old families in Orissa outside the Rajwarah), "it can hardly be said that the country as a whole is a loser". Under the existing condition of the law, it is impossible to insist upon racial distinctions in the transfer of properties. It is a matter of satisfaction that the alien proprietors managed their property with justice and fairness to the raiyats, and it is a matter of regret that several old families of Uriya proprietors have not a creditable record of their dealing with the tenantry.

21. *Value of Estates*—The steady increase prices of the zamindariestates furnishes evidence of the high advantages and of the secure return that this form of investment affords to capitalists. It is also an evidence of the increased property of the Province.

22. *Tenure-holders*—The principal classes of tenure-holders in Orissa are the Makaddams, the Sarbarahkars, the Padhans, the Pursethis, the Kharidadars, and the Shikim zamindars. The history of their origin and the incidents of these tenures have been thoroughly discussed in the Report. I take it to be the most remarkable point about these tenures that none of them have been created by the zamindars with the exception, perhaps, some Sarbarakars and Shikimi zamindars. The other tenures have grown concurrently with the growth of the zamindari interest, and the origin of many is lost in the dim obscurity of the last century. The village headman has been transferred into the Makaddam or padhan ; the purchaser of the waste land has grown into the kharidadar ; the zamindar's subordinate rent-collector has ripened into the sarbarakar, just as his master, having been originally rent-collector of a higher grade, has acquired the substantial interest of a zamindar. These various grades of a tenure-holder appear to have grown in course of the transition of the Uriya village communities into their modern form, and the prominent feature of their distinction from ordinary tenures is that very few of them are created by the zamindars during this century, and most of them have grown concurrently with, and some times in spite of the opposition of the zamindars. The researches of Mr. Stirling and other show that in the Moghul period the idea of centralisation found favour with the ruling race, and the zamindars succeeded in repressing many makaddams. The tables were turned during the Mahrattas rule. This latter favoured the village headmen at the expense of the zamindars. In the early days of the British conquest even handed justice was done to both classes. To save themselves from the zamindars, many Makaddams applied to be admitted into direct engagement with Government, and their prayers were allowed (*vide* paragraph 12 and 40 of Mr. Stirling's Minute), and this accounts for the large number of petty estates in the Province. It is necessary to keep the historical circumstances of the origin of each class of tenure in view, in order to adjust its relation to the zamindars.

Elaborate enquires were made at the last settlement, and the rights of the tenure-holders have been settled once and for all.

The multiplicity of the co-sharers of the tenures noticed in paragraph 295 presents a point of difficulty that adds not only to the zamindars' trouble and expense of collection, but the existence of so many hungry mushroom middlemen almost constitutes a menace to the welfare of their subordinate tenantry.

23. *Facility for collection*—Paragraphs 299 to 305 of the Report deal with the question of giving facility to the zamindar in the collection of rents from the proprietary tenure-holders. In paragraph 305 Mr. Maddox sums up his recommendations. He proposes—

- (1) The extension of sections 12 to 17 and 93 to 100 of the Tenancy Act to Orissa.
- (2) That the Kubuliyats of the Sarbarahkars should be cancelled, and only one or more nominees of the zamindars should be allowed to engage.
- (3) That clause 11 of the tenure-holder's kabuliyat should be vigorously worked, so that habitual defaulters' tenures may be placed under khas management:
- (4) No immediate action is necessary, but Government should call for a detailed enquiry after five years with a view to legislation, if necessary.

In my letter No. 30603, dated the 20th June, 1900, to the Board, I have stated the reasons why the proposal for cancellation of the sarbarakar's kabuliyat does not commend itself to me. His fourth proposal, namely, that further action should be deferred for five years to see the working of the settlement, seems to me the wisest course to pursue. As regards the third proposal, I would prefer to leave it to the Collectors to work clause 11 of the kabuliyat to the best of their discretion and on consideration of the circumstances of each case of default.

But the present question of giving facility to the proprietors of estates having these tenures is a part of the larger question of giving collection facility to all the zamindars of the temporary-settled estates in the Province. I understand that the question was taken up in Sir Charles Elliott's time, and I hope that, when the time comes for reconsidering the subject, the scope of the inquiry will take a comprehensive form. I feel it necessary to make these remarks, because I gather from the statistics given in paragraph 301 of the Report that the difficulties arising from the proprietary tenures are not specially great. In discussing these statistics Mr. Maddox remarks that the percentage of suits to the total number of tenures is only 17, and of these suits many are for a share of the rent

only. Considering these he remarks : "On the other hand, it is by no means certain that such strong measures are necessary." In the absence, therefore, of urgent necessity for vigorous measures, I would repeat what I recommended in my letter to the Board that the fourth recommendation in paragraph 305 of the Report would suffice for the present necessities of the case.

24. *Value of proprietary tenures* :—The statistics given in paragraph 307 are only for a small area, but they show that the market value of these interest is very high. This fact in itself furnishes a satisfactory evidence of the growth of prosperity of the middle-classes in Orissa. These tenures are highly prized by the middle class men in Orissa. The profit may not be large, but the fact of *quasi-zamindarship* (*hakiodar* as they are called in Balasore) gives a position and local prestige that are very highly valued by the men, specially if they happen to be resident in the village consisting of the tenure. The resident of such village do not care for the zamindars, as they have neither to deal with him nor can he sue them. In regard to these villages the zamindars' position is no better than their position in the *patni* villages of Bengal. The tenure-holder is a man of local consequence. The ancient traditions survive and the *makaddam* is still the arbitrator in the local quarrels. His authority is still held in considerable respect by the local tenantry, and these village headmen are capable of being rendered very serviceable to the Administration. Despite the infusion of non-residence purchasers among this class, the resident village headmen are the people whom the police look up to for help in discovering heinous crimes : they are the people to act as interpreters between the rulers and the ruled. The people know that, as residents of the village, these headmen have as much at stake as the other residents, and this fact commands confidence in their words, so that whenever we contemplate the introduction of sanitary innovation, or the imposition of a new tax, or the adoption of any new precautions against an epidemic, or whenever we desire to bring the wishes of the Government home to the people, we can do it most effectually through these headmen. They were the trusted leaders of the people in Mr. Stirling's time, and their position has not materially changed during the last 80 years.

25. *Bazyafti tenures* :—These tenures from the surviving landmarks of the attempts made by the middle classes to create revenue-free grants for themselves in the name of the ruling power. Sections 18 to 29 Regulation XII of 1805 show how these claims have been dealt with. In Orissa frauds on an extensive scale were attempted, as is evidenced by the statistics given in paragraph 316 of the report. The statistics show that at the last settlement the revenue-free claims for over 3 lakhs of acres were disallowed and those lands were resumed. They were, however, very liberally dealt with, as 221,000 acres were assessed at half rates, and the instructions that rates should be light were interpreted by the Deputy Collectors with lavish liberality, and they generally placed the *bazyaftis* in the lowest class of the village soil. These concessions were granted with a view to avoiding the creation of widespread discontent, and concessions that have been at this settlement shown in the assessment of these tenures are in general consonance with the traditions of the last settlement. I will return to this subject in my review of Part V of the Report.

26. *Raiyats* :—The *thanis* and the *pahis* form the principal classes of the raiyats in Orissa. The *thanis* were originally the resident raiyats of the village corresponding to the ancient *Khudkast* raiyats of Bengal and the *pahis* were the non-resident raiyats who were merely tenants-at-will. The *thani* raiyats have been in enjoyment of a hereditary right of occupancy from time immemorial. Writing in 1821, Mr. Stirling remarked : "They do not in general take out *pattas*, nor do they give *kabuliyats* as they hold the lands under their jot or plough hereditarily, and the amount of their proper payments on account of rent depends on a measurement and adjustment of rates made long anterior to the present day by act of the Sovereign." The *thani* raiyat's status is the creature of custom that has been in operation in the Province from time immemorial. According to the ancient custom the *pahi* raiyats were mere tenants-at-will, were also the tenants of the *bazyaftidars* and other tenure-holders. The Report points out the epoch which Act X of 1859 and the Tenancy Act have marked by the creation of occupancy-rights for the *pahi* holdings. But the benevolent intentions of the law and the boon conferred by it were unknown in many parts of the mufassal and the ancient custom that the *pahi* raiyats have no occupancy-rights was in full swing in many parts of the Province ; even at the commencement of the settlement the word *pahia* continued among the raiyats as a term of reproach indicative of absence of rights. In despatch No. 6. dated 21st March, 1882, the Government of India reported to Her Majesty's Secretary of State instances of illegal ejection of the raiyats and proposed remedial measures for Orissa for the protection of the tenantry, (Tenancy Act papers). The present settlement proceedings have brought home to the *pahi* raiyats the real nature of their rights. The educative influence of the settlement camps inclined the *pahi* raiyats to suspect during attestation that they might have rights of some sort. When after attestation they got *parchas* with *dakhalsatyabisista*, *shtitiban* (settled and occupancy) status they formed great expectation, and when, on conclusion of the settlement proceedings, copies of *khatians* (called *pattas* by the raiyats) were distributed alike to the *thani* and *pahi* raiyats, showing their occupancy-rights, then only the great mass of *pahi* raiyats could believe that they had definite rights and were not mere tenants-at-will. Old ideas die hard in this Province, the traditions of the last settlement when *pahi* raiyats were tenants-at-will ruled the masses, and the reforming provisions of the Act X of 1859 or of the Tenancy Act were known only to an insignificant minority. In regard to the masses of the people the *pattas* (i. e., *Khatianslips*) of this settlement have been the most tangible and the most convincing evidence of the occupancy-rights. In many places the masses look upon it as a boon conferred by Government to inaugurate the new settlement, and it is said that the village poets of several places have celebrated the occasion in rustic songs full of gratitude for the favour shown to the masses.

I should therefore say that in making the occupancy right real in the eyes of millions of *pahi* raiyats, the Settlement Department has performed a service that cannot be too highly valued. The

educative influence of the settlement camps has enlightened the raiyats in regard to the incidents of their rights, and has thus performed a service that makes for the well-being of the tenantry.

27. *Under-tenants*—It is satisfactory that the number of under-tenants who are without occupancy-rights is not very large. In the statistics given in paragraph 340 of the report the under-tenants shown in column 2 have generally got occupancy-rights, and the rest of the under-raiyats number about 75,000. They have not got occupancy-rights as a rule. But numbering, as they do, 145,000, the under-raiyats of column 2 cultivate the major part of the area dealt with in the statement, and it is well that they are not tenants-at-will.

28. *Transfer of rayati-holdings*—Paragraph 328 of the Report gives some statistics of transfer of rayati-holdings. It is also significant, as pointed out in the Report, that the number of sales of *pahi* lands in Balasore in 1897-98 was about 3,000 or three times the average of the decennial period. The question is very important. There are reasons for doubting whether the *pahi* Lands are at all transferable. It will be a serious matter if the raiyats take advantage of their occupancy-rights in order to part with their lands and reduce themselves to the question of under-raiyats. I defer my remarks on this subject for the present, as I am calling a special Report from the District officers on this subject, which will form the subject of a separate communication hereafter.

Rent-kists and proportions :—It has been decided that the kist-dates do not call for any alteration, and in his Report to the Board, Mr. Marindin was of the opinion that the present proportions of the revenue need not be altered. Paragraph 344 of the Report does not, therefore, call for any further remarks from me.

30. *Amount of collections* :—In paragraph 346 some statistics of collection by the zamindars have been given. The statistics as they are show very good collections, and in some cases the percentages attained (*e. g.*, 107 per cent., 105 per cent., 98 per cent.) exceed the percentages in some of the best managed khas mahals of Government. It is further to be noticed that the statistics in the tabular statement relate only to 82 estates out of over 4,000 estates in Cuttack, and the revenue of the estates selected being over Rs. 1,000, it may be presumed that the zamindars are persons of influence as is generally the case in big-zamindars and having regard to the marked difference in the local influence of big zamindars as contrasted with petty zamindars, it may well be doubted whether the statistics represent the general condition of affairs in Cuttack district, where petty zamindars predominate (*vide* paragraph 269 of the Report).

In regard to Mr. McPherson's figures for the Puri district, the remarkable feature is that the *bazyafiti* assets (printed in bold figures) show 95 per cent. collection when ordinary assets show 90 per cent. This is not in accordance with the generally prevalent opinion of the officers of the Settlement Department. It is often remarked in the completion reports and elsewhere that the *bazyafitidars* are very bad paymasters, and that the assets from this class are very insecure. Mr. McPherson's figures, at any rate, reflects no discredit upon the *bazyafitidars*.

Paragraphs 213 and 214 of Mr. Kingsford's Report, quoted in paragraph 342 of the Report under review, do not give statistics for his opinion on the percentage of collection at Balasore, but his general percentage (87½ or 14 annas to the rupee) will not perhaps, be dissented from by many people.

The question about the percentage of assets collected by the zamindars is very interesting, and I am glad that there is a consensus of opinion among the Settlement authorities that the collections are ordinarily good. The docile nature of the people, the small number of rent-suits, the working of the revenue sale law and the market value of the zamindari interest in the Province, all furnish cumulative evidence pointing to the fact that the collections are generally good, and zamindaries do yield handsome profits to their owners. Owing to the absence of genuine collection papers for a sufficiently long period, the statistics compiled by the Settlement authorities cannot claim absolute certainty; but then it is to be borne in mind that possible many zamindars kept back their collection papers because they contained inconvenient entries. So, on the whole, there can be no doubt that the collections are generally good in the zamindaris of the temporarily settled area.

31 *Part IV—Settlement procedure*—This part of the Report reviews the various stages through which the work has passed. It is valuable as a record of the work done, and the record of the experience in the various stages of the work will have certainly an immense practical value in future settlements. It is interesting to observe how the various rules were framed to meet practical difficulties, and as the fruit of thoughtful observation of successive Settlement Officers the rules bear testimony to the earnestness and industry which Mr. Maddox and his predecessors had brought to bear upon their work. As these rules have received the approval of the Board and of Government, they call for no further remarks in this review.

32. *Part V—Results of Settlement*—The results have been discussed under three heads, viz., areas, rents and revenue. I have already dealt with the question of extension of cultivation and the prospects of further extension. The remaining remarks on areas are of minor importance and call for no notice.

33. *New rents*—The comparative statistics given in paragraph 512 show at a glance the progress of the Provincial rent roll during the last sixty years, as well as the effects of the enhancement proceedings upon the existing rent roll.

At the close of the last settlement the assets of the temporarily-settled estates stood at 21 lakhs, but they rose to 34 lakhs before the enhancement proceedings began. The enhancements raised them to Rs. 38,68,000, so that this settlement is responsible for an increase of Rs. 4,58,000 over the existing rents. The largest contribution to the increase comes from the *bazyafiti* and the settled and occupancy-holdings which have altogether contributed Rs. 2,70,000. Other privileged tenures, such as the *Kharidas*, the *kamil bazyafitis* and the *thani-pahi* mixed holdings have also yielded a decent increase. The resumed chaukidari jagirs have been valued at Rs. 43,000 and other jagirs resumed at Rs. 16,000. On the whole, it appears that the enhancements are equitably distributed, regard being had to the number and liability to enhancement of each class of tenancy.

34. *Incidence*—Considering next the incidence of the new rent, it is satisfactory to find that the settled incidence of the privileged tenures still remains substantially below the *pahi* incidence, notwithstanding the fact that the former have to bear the largest proportion of the enhancement. These rents were fixed 60 years ago, and in the meantime prices have trebled. Under these circumstances, the enhancements are justified not only by the positive enhancements of the Tenancy Act but on grounds of equity as well. These principles were not rigidly enforced against the *thani* raiyats simply on grounds of equity and the leniency is warranted by the historical fact that these rents had been pitched too high from ancient times, as was admitted by the authorities at the last settlements. Considering the present position and privileges of the *pahi* raiyats under the Tenancy Act, it has been thought inadvisable to increase the *thani* rent much further. The correspondence on this subject with the Government of India has been reprinted in the second volume of the Report, and, on the whole, there are ample reasons for thinking that the leniency shown towards the *thani* raiyats is well deserved.

The enhancement of the *nisfi hazyafiti* incidence from 6 annas to Re. 1 seems at first sight too high; but this view will be modified when it is borne in mind that at the last settlement these holdings were assessed at 12 annas per acre on an average, and concession of half this rate was given as a matter of grace for the last settlement only. Considering this fact and the rise in prices, the new incidence of Re. 1 per acre would not appear too high and these tenants ought to know that, despite the increase, their rates are still less than half the rates of the *pahi* raiyats, who will have to pay at Rs. 2—5 per acre.

The high incidence of the homestead (*chandna*) is accounted for in the Report. The increase amounts to only 1 anna over the existing rate before the rent settlement.

35. *Alteration of rents*—It is satisfactory to observe that for 54 per cent of the holdings the existing rents were retained, for 3 per cent rents were reduced for loss of area, and for 6 per cent the rents were newly assessed. Deducting these it is found that for 13 per cent of the holdings, rents were enhanced for excess area. These mostly belong to the *pahi* occupancy holdings, and some to *thani pahi* mixed, holdings. This percentage is explicable when it is remembered that regular remeasurement of raiyat's holdings by zamindars are rare in the division, especially for several years before the settlement. The excess areas which the raiyats were enjoying by private arrangement with the gomastas have been discovered at the survey and to eliminate cases of nominal excess from enhancement 10 per cent allowance was ordered on account of difference of measurement. It remains to notice that for 24 per cent of the holdings rents have been altered on other grounds. These comprise the cases of the privileged tenants (viz., the *bazyafitidars*) who were paying too low a rent. I have already, stated the reasons for the enhancement of these rents.

These statistics of percentages show the moderation that has characterised the present rent settlement proceedings. They afford proof positive of the fact that 57 per cent of the tenantry will not have to pay a pice as extra rent in consequence of the settlement. The *pahi* incidence has risen by only 2 annas per acre, so that even the 13 per cent, whose rents are enhanced for excess area, will not have to pay much extra rent. Of course the *bazyafitidars* and other privileged tenants who fall under the 24 per cents., altered on other grounds, will feel the pressure of the extra demand, but this was anticipated by them under the terms of their leases; and it is undeniable that even in their case great solicitude has been shown, and the pitch of the enhancements has been kept much lower than the strict terms of their leases would allow.

36. *New Government revenue*.—The principles of the revenue assessment have formed the subject of discussion in the previous correspondence reprinted in the appendices, and orders on the subject have been passed by Government. It remains, therefore, only to consider the financial effects of the increased revenue. The calculations are made on the Settlement Officer's figures, and are subject to slight modifications on account of any variations of the Settlement Officer's proposal made by the confirming authorities.

The last settlement had fixed the Government revenue of the temporarily-settled estates at Rs. 13, 54,400 and this settlement will yield Government revenue of Rs. 20,62,600, so that there will be an increase of Rs. 7,08,200, or 52 per cent. Of this amount Rs. 2,70,100 comes by reduction of the zamindars' income, and the balance is got in the shape of enhancement of the tenants' rents. It is, however, shown in paragraph 557 that the actual loss of the zamindars' income is Rs. 2,80,000.

The general percentage now retained as revenue comes to 54 percent.

In assessing estates to Government revenue, the facts of each estate have been separately considered in the reports, as I have remarked already. Each case has been considered on its merits.

The practical absence (i.e., only 5 estates-paragraph 564-out of over 6,000) of recusant estates shows that the zamindars do not find the new revenue demand risky or insecure.

37. *Kists*—The proposals in paragraph 565 regarding the alterations of the dates and proportions of revenue at the kists do not call for any remarks, as the question of alteration of dates has been settled in the negative by Government orders, and Mr. Marindin has submitted his Report, now pending before the Board, stating that in his opinion, alteration of the proportion is undesirable at present.

38. *Part VI, Chapter XXIII-XXIV*—No remarks appear to be necessary.

39. *Chapter XXV—Expenditure*—The total cost is twenty-one lakhs odd, which will be recouped in three years by the increased revenue demand.

40. *General*—The foregoing remarks bring this review to a close. The task before the Settlement authorities was not a light one. To prepare the record-of-rights of a million and-a-half tenants occupying 8 millions of plots is in itself a task of no mean magnitude, not to mention the rent and revenue settlement work. These records, by fixing definitely the holding and rents of the raiyats, have conferred a great boon upon the tenantry, which, it is to be hoped, will be fraught with the best results for the administration.

While Mr. Maude framed the attestation rules and organised this difficult work, the difficult task of framing the rules and organising the work for rent settlement fell upon Mr. Maddox. The smoothness with which this great work has been carried out reflects the greatest credit upon the Settlement Officers and their assistants. At one time great friction was apprehended in this work ; but, while the concessions sanctioned by Government acted as lubricants, the work did none the less demand great tact in the local officers, and it must be admitted that they acquitted themselves well.

The revenue assessment reports have elicited favourable remarks from the Board both for the manner in which they have been written and the matters they contain. Most part of the confirmation work in regard to the revenue proposals fell on the Commissioner's office, and Messrs. Cooke, Stevenson, and Marindin took part in the work. When I took over charge three months ago over two thousand estates remained to be dealt with, but the work is nearly finished, and I hope that in a week the last pending estate in my office will be disposed of.

No. 2633-354-2.

From

J. B. FULLER, Esq., C. I.E, I. C. S.,

Secretary to the Government of India.

To

THE SECRETARY TO THE GOVERNMENT OF BENGAL,
REVENUE DEPARTMENT.

Dept. of Revenue and Agri. *Land Revenue,*

Calcutta, the 24th December, 1901.

Sir.

I AM directed to reply to your letter No. 1533 T. R., dated the 4th October 1901, forwarding the final report on the settlement of the three districts of Orissa.

2. The enhancement which has been made in the land revenue is as much as 52 per cent, but even so it is materially less than was anticipated in the correspondence which passed regarding the principles and procedure of the settlement. The proportion of the proprietary assets taken as land revenue has been largely reduced. At the preceding settlement it was on the average 65 per cent. under the new settlement it is no higher than 54 per cent. : Moreover nearly eight lakhs rupees of the enhanced revenue have been relinquished by the progressive introduction of the new assessment in the case of estates the liabilities of which have been largely augmented. The revised assessment has been received by the people almost without an appeal. The Government of India have no doubt of its justice and moderation and confirm it without hesitation.

3. An average of 54 per cent. as the proportion of land revenue to proprietary assets is rather higher than was anticipated under the orders which prescribed the principles of the re-settlement. Estates are assessed separately, according to their particular circumstances, and it is of course impossible to ensure that the results will precisely conform to a standard average. The reasons for the excess are stated on page 385 of the report and are touched upon in paragraph 24 of the review of the Board of Revenue. It results from the assessment of a comparatively few large estates (apparently less than 10 per cent. of the total number) at more than 55 per cent. of the assets, either because they have been specially benefited by the large outlay incurred by the State on irrigation canals or flood embankments, or because assessment at a lower fraction would entail a reduction of the existing revenue for which there was no sufficient reason, or because rent enhancements added largely to the zamindar's income and the adoption of a lower fraction of assessment would deprive Government of a fair share in this increase. The large expenditure which the Government annually incurs in maintaining the canals and flood embankments of Orissa undoubtedly enhances its claims to land revenue. The canal system alone entails upon Government a *net* annual expenditure of about ten lakhs of rupees-equivalent to nearly half the revised land revenue of the three districts. The interesting information which is given in paragraphs 109 and 115 of the report indicates the great value of these public works in securing proprietors against losses in rent collection, if not in increasing their rental demands. Having regard to this consideration and to the others already referred to, the Governor General in Council is of opinion that there is a satisfactory justification for the divergence of the actual average proportion of land revenue to assets from the average which was anticipated.

4. The difficulty of the settlement was mainly due to the obligation laid upon the Settlement Officer to settle rents between the tenants and the zamindars, as well as the revenue payments made by the latter to Government. In respect to rents, the actual results of his interference have been very small. The assets on which he assessed are 13 per cent larger than those which he found existing, but

the increase is very largely due to the valuation of land held on nominal payment, and the enhancement actually imposed on the important class of *thani* ryots amounts to only 6 per cent. When the results of the earliest assessments came before them in 1898, the Government of India formed an opinion that this measure of enhancement was hardly adequate in the case of cultivators whose rents had suffered no change for 60 years: but it was then too late to revise the Settlement Officer's operations. It is shown that a considerable proportion of these ryots have disappeared during the past 60 years, owing no doubt to the famine of 1865-66. But this is no reason why those who have held their ground should be absolved from contributing some share of the large rise in the value of their produce which has resulted from State-constructed improvements and settled Government. It has been urged that these tenants have from the first been paying highly, and that their existing rents are still fairly adequate. Forcible evidence to the contrary effect is given in paragraph 328 of the report, which alleges that since the completion of the settlement "sales and mortgages of ryoti holdings have become so common as to arouse the apprehension of zamindars and district officers". The reluctance of the Settlement Officers to impose a larger enhancement arose no doubt from the conviction that the sub-division of holdings, which had been encouraged by the non-intervention of Government for 60 years, had so greatly diminished the income of individuals as to leave no margin for an increase of rent assessment.

5. The settlement has been exceedingly costly, the rate of expenditure working out to Rs. 637 per square mile. The conditions under which the settlement was taken up were adverse to economy. There was but little local experience in the conduct of settlement operations, delay was occasioned by long and elaborate discussions as to principles and procedure, material for which was not forthcoming till the surveys and enquiries were in an advanced stage, and the decisions which were arrived at entailed the redoing of a good deal of the field work. But the Government of India recognise the magnitude and the difficulty of the operations and the success with which they have been conducted, and congratulate His Honour the Lieutenant-Governor on the completion of this arduous and complicated undertaking.

6. With reference to paragraph 21 of the orders of the Board of Revenue, I am to express a hope that the ryots are not called upon to pay their rents before they are able to reap and dispose of the crops which are supposed to provide the funds for payment.

7. Mr. Maddox' report is an interesting and valuable document. But I am also to notice its extraordinary length. It is necessary that a Settlement Officer should describe in some detail his procedure and its results, and it is convenient that he should take the opportunity of placing on record information of interest which he has gathered in the course of his enquiries. But his writing should be confined within limits which in the present case have been greatly exceeded.

I have the honour to be,
SIR,
Your most obedient Servant,
J. B. FULLER,
Secretary to the Government of India