## CHAPTER XVI.

## KHANAPURI

Explanation to the term. the next stage was the Khanapuri or the filling up of the columns in the draft records. It was, as had been said before in treating of the cadastral survey; found advisable to entrust to up-country amins the actual mapping of the village, but the records were almost invariably written by an Uriya. As the up-country man worked faster than the Uriya it was found more economical to allow the map to be made first and to then hand it over to the Uriya amin, who, while filling up the records, corrected in red ink any mistakes that he found in it.

Forms.

390. The records to be filled up by the Khanapuri amin consisted of :—

(1) A field index or khasra.

(2) A detailed record of each tenant's lands called a khatian.

(3) An abstract record of the rights of proprietors and tenureholders known as a *khewat*.

Subsidiary forms to facilitate the check and correction of the draft records were also prescribed, viz., a parcha or abstract of the draft khatian to be given to the tenant and a dispute list,

The forms finally determined on for the Settlement, together with the rules for their praparation, will be found in Appendix B. Briefly their essential features are:—

The khasra is a list of the fields in the village arranged in the order of their serial numbers with the names of all owners and occupiers, the area, and a description of the land and crop entered against each.

The *khatian* is a list of tenants showing the fields held by each one, their area, the rent payable, and the status of the tenant and certain special incidents of the tenancy.

The *khewat* shows for each property for which it is prepared the names of the owners, and character and extent of their interest.

The further details shown in these records depend on local considerations but so much as is stated here is essential.

391. Work began in 1890-91 in the parganas of Rahang, Serai and Commencement of work. Chaubiskud in the District of Puri.

Mr. A. K. Ray was Settlement officer from December 1889 to December 1890, but does not appear to have issued any instructions for the guidance, of the Survey Department, who had to work on the lines laid down in the Survey Manual supplemented by rules drawn up by Mr. Ewing who was in charge of the cadastral party.

392. With Mr. Reily's appointment as Settlement Officer the system was changed; to each survey camp were attached one or more Assistant Settlement Officers whose business was to supervise and check the *khanapuri* while it was in progress and to attest the records on their receipt from the Survey Department. Detailed rules for the guidance of the Assistant Settlement Officer of Tangi Circle were drafted by Mr. Reily in April 1891 and were criticised by the Director of Land Records and by the Commissioner. The main points insisted on were:—

- (a) The issue to the occupiers of the land of jamabandi slips or parchasise, extracts from the records giving the number of each field and its boundaries, the class of soil and crop.
- (b) The actual check on the ground of a certain proportion of entries in the *khasra* by the Assistant Settlement Officer and the reporting of all serious errors to the officer in charge of the survey camp.

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393. There continued, however, to be a considerable diversity of practice, and towards the end of the year 1891 fresh rules were drawn up by Mr. Reily dealing with the procedure for the settlement of boundary disputes and the preparation of draft *khewats*; but no complete instructions for the writing up of the records were issued until Mr. Finucane, the Director of Land Records, visited Orissa in March 1892; and the Uriya translation of the rules then agreed upon was not placed in the hands of the Survey Department until the 1st June of that year. Most of these rules were taken from the instructions drawn up Mr. Lyon (then an Assistant Settlement Officer in Orissa) for the benefit of the survey camp under Mr. A. W. Smart at Jajpur.

The khanapuri of the Puri district was completed by the survey party under Mr. Ewing by the 1st May 1892, and he then moved into the Cuttack District, where two parties under Messrs S.O. Madras and A.W. Smart were already working.

By the 30th September 1892 the *khanapuri* of the whole of the temporarily-settled area in Puri, excluding Khurda 371 square miles, had been finished; and in Cuttack, the records of 1,443 square miles or nearly two-thirds of the area under Settlement had been written. The balance of work remaining consisted of 831 square miles in Cuttack, 105 square miles of Puri Temple Lands in District Puri, and the whole of the Balasore District.

Rules 1892-95

Rules 1892-95

Rules Were drawn up at a conference of Orissa Settlement and Survey Officers, and these after approval in November 1892 by Mr. Macpherson, the Director of the Department of Land Records, and by Lieutenant-Colonel Sandeman, the Director of Bengal Surveys, were at length, in March 1893, printed in their final form. The survey officers worked on them from the beginning of the field season of 1892-93, and with but few alterations they remained in force until the completion of the record writing in Orissa. They are to be found in their final form in Appendix B, Part II. to this report.

Went of rules in early the District of Puri was done by the Survey Department without much assistance from the Officers, who had at that time little or no experience, could give them. More than half of the Cuttack District was completed in similar circumstances, and it is not surprising that the Survey Department complained of the difficulties of the work. I quote here the list of difficulties mentioned by Colonel Sandeman in his report on Bengal Surveys in the year 1891-92.

Difficulties in khanapuri.—"The difficulties in Khanapuri have been very great during this season:—

"Firstly.—The slow rate of work of the Uriya.

Secondly.—The number of changes in procedure during the field season. No less than four different forms of Bhowriah (khasra) and three different forms of Warijah (khatian) were successively brought into use during the field season.

Thirdly.—Although the Settlement Department at the commencement of the season were supervising the khanapuri, no distinct instructions were received as to the filling up of the records until Mr. Finucane, the Director of Land Records, visited Orissa, when on the 26th March 1892 a Hidyatnama was published; but it was not till the 1st June 1892 that Uriya translations of these instructions, although repeatedly called for, were received from the Settlement Department.

Fourthly.—Almost throughout the entire area Khanapuried no draft Khewats had been prepared by the Settlement Department, they had therefore to be prepared by the Survey Department and compared with the A, B and C Registers of the Collectorate. In some parganas draft Khewats had been prepared Mahalwar, but these were practically useless as they had to be converted into Mauzawar. In addition to this, there was great delay in the supply of the Khewat forms, some Parts (I. and III.) were are received till 8th and 12th August 1892.

Fifthly.—With some exceptions the Khanapuri officers supplied by the settlement to aid in the supervision of Khanapuri and settlement of disputes were quite inexperienced, and had to be taught their duties. Until they had learnt their work they did not help greatly.

Lastly.—The establishment of Khanapuri amins necessary for the large area expected could not be obtained.

396. Naturally the errors in the *khanapuri* were numerous, and the early correspondence abounds in complaints of the inaccuracy of the records.

In October 1891, Mr. Sen in the Tangi, and Mr. Walsh in the Serai and Chaubiskud Circle, reported that they found so many mistakes that their muharrirs had to go over the whole ground again field by field.

Mr. Reily compiled a list of these in four circles and found that in a total of 62,643 fields, 21,334 mistakes had been found, or 1 in every three plots.

In the recess of 1892 Mr. Walsh reported that the number of corrections made in the records of his circle exceeded the total number of fields, while apart from the subdivision of *Khatians* the proportion of mistakes found in the *khasra* to the total number of fields entered was in the recess of 1892 reported to be—

Per cent.
In Kotdes .... 16\* | In Tangi .... 90
In Rahang .... 40.35 | In Kotrahang .... 30

It does not appear, however, that the *khasras* were really so defective as might be inferred from these figures. From the details of the list of mistakes compiled in 1891 it was found that of the total number of corrections about 10 per cent, were in the area columns, 2 per cent, in boundaries, 8 per cent, in the numbering of fields, 30 in the name of occupants, 7 per cent, in the demarcation of *tahsilalahidas*, 19 per cent, in the class of soil, 18 per cent, in entry of names in the wrong column, and 6 per cent, in the entry of last settlement field numbers.

The class of soil is at best a debatable matter, and the only serious mistakes would be those in the wrong entry of names, wrong areas, wrong numbering, and in the demarcation of tahsilalahidas; say, half the total.

397. Much of the khanapuri procedure is so colsely connected with attestation that it will be simpler to consider the points raised when dealing with the latter subject, and I propose in this chapter to deal only with:—

(a) The relations of Khanapuri and Survey Officers.

(b) The entry of areas in the tield.

(c) Requisition of rent-rolls from proprietors.

(d) Distribution of parchas
(e) Entry of status by amins.

(f) Entry of rent at khanapuri.

(g) Employment of Kanungos, Patawaries and Chaukidars.

(h) Identification of last settlement fields.

(i) Treatment of disputed entries.

(j) Boundary disputes.

( $\hat{k}$ ) Unit of survey (i.e., under survey).

(1) Preparation of draft khewats.

(m) Progress and out-turn.

Relations of Khanapuri and cised joint control over all establishment utilised for survey and Khanapuri simultaneously. They corresponded directly with one another, and when they could not come to a compromise in any matter of principle referred it for decision respectively to the Directors Land Records and Surveys. The Assistant Superintendent of Survey or camp officer, had the immediate control of the whole establishment entertained for survey and Khanapuri, and was entirely responsible for the accuracy of the survey. The business of the Khanapuri officer was, with the help of his inspectors, to check the correct writing up of the records and to dispose of all disputes. He had the powers of an Assistant Superintendent of Survey as well as of a revenue officer under the Bengal Tenancy Act, but had no power to punish or dismiss any of the survey establishment except through the camp officer.

399. During the early part of the work the amins doing khanapuri left the column for area blank and areas were extracted and khatians prepared in the camp after receipt of the records from the amin.

This system had the double disadvantage of leaving the raiyat without any idea of the area entered in his name up to the time of attestation and of overburdening the Survey Department with work to be done in recess. For the

<sup>\*</sup> Does not include mistakes in soil classification.

<sup>†</sup> See Adpendix B.

season of 1891-92 Colonel Sandeman adopted the new procedure \* of having khatians prepared day by day and extracting areas by skilled computers in the field immediately on the completion of the khanapuri.

This system was continued to the end of the work and is thus described in a note of the 4th March 1893 by Messrs. Sandeman and Macpherson:—

An Uriya amin will do the Khanapuri, also correcting the foreign amin's map in red whenever the rights in the land are incorrectly shown. When available, a second Uriya amin will write the Khatian and parchas while the first writes the khasra, entry for entry, the object of employing two men being to check corruption and hasten preparation of the records for final attestation. The Khanapuri amins will also fill in the lakhiraj bahal, minha jagir add nij-jot statements as laid down in the rules following.

The Khanapuri of the records being thus finished the areas will simultaneously be extracted and entered in them all. The khasras, khatians, and the statements mentioned in rule 8 accompanied by a trace of the map, or when delay would be caused by the preparation of a trace by the original sheet, will then be despatched to the circle officer for final attestation. The areas will be entered in the parchas if brought by the tenants, to the circle or sub-circle office at the beginning of the attestation proceedings.

Foreign inspectors will check the survey. Uriya inspectors will check the Khanapuri unless the Settlement Officer will accept the best of the foreigners aided by Uriya muharrirs.

When the records are finally received back in the Survey Office after attestion, they will be completed and statistics extracted.

400. Before the amins took the field the proprietors and tenure-holders were served with notices requiring them to file rent-rolls for the villages under survey.

These notices were at first served by peons, but it was afterwards decided to use the agency of the post office, and the notices were sent in registered covers, the postal receipt being taken as evidence of delivery. The form of these rent-rolls locally known as *ekpadia* varied considerably from simple lists of tenants with the area held and the rent payable by each to elaborate statements of demand and collection arranged status by status and raiyat by raiyat. Strictly speaking the production of existing documents only could be enforced, but as nearly all zamindari accounts in Orissa are kept on palm-leaves which were very bulky and inconvenient to handle it was the practice to demand extracts in some fixed form.

This procedure necessarily left room for misrepresentation and collusion, but it is very doubtful whether the proprietors could have been induced to give up their original papers while they could generally be made to bring them at the time of attestation when so required.

The amin when going to the village took with him these ekpadia papers which formed the basis of his khatians, no deviation from the names given therein being allowed except with the consent of both landlord and tenant, or on the orders of the khanapuri officer. †

Distribution of parchas.

Department and issued to the tenants, except in the Rahang, Serai and Chaubiskud Circles. Mr. Reily considered the information given to be insufficient and prescribed a counterfoil jamabandi slip showing the class of holding, the boundaries of the field, the nature of the crop grown, the area, and the rent as stated by the landlord and by the tenant.

Before commencing khanapuri in 1891 the amin gave to each tenant a parcha feil taking a receipt on the counterfoil, and entering on both the tenant's name. As khanapuri proceeded he entered each field in the counterfoil and in the parcha produced by the tenant. When the next field was found the tenant produced his parcha to have the field shown on it. At this stage the column for area was left blank to be filled up at attestation. ‡

In the seaon of 1892-93, arrangements having been completed for the extraction of areas in the field, an attempt was made to collect the parchas before the amin left the village in order that the areas might be entered in the camp office and the parchas returned to tenants in time to allow of their verification before the final attestation of the village. This plan was not, however, successful and was

<sup>\*</sup> Letter No, 732, dated 26th December 1891, from Colonel Sandeman to the Settlement Officer. See Appendix B. II., Rule 16.
See Appendix B. III., Chap. 4, Rule 3.

abandoned before the end of the season. The collection of parchas created a panic in the minds of the raiyats and the re-distribution was accompanied by great corruption.

Down to the end of the season of 1893, i.e., during the whole time of **khanapuri** in the Cuttack and Puri Districts, the **amin** was required to obtain the signature of both landlord and tenant to the **parcha**, and if he could not do so, entered the holding in the dispute list for the orders of the Assistant Settlement Officer.

During the season of 1892-93 the columns for rent and status were filled up by the *amin*; in 1893,94 they were filled up by the *khanapuri* inspectors; and from 1894 onwards were left blank to be filled up at attestation.

4(2. It has always been held that the entry of the status of a tenant cannot safely be left to an amin, but must be personally attested by a revenue officer in the case of every raiyat, and rule 15 of the Rules 4th March 1892 runs thus: "The survey amins will in no case enter the status or length of occupancy of raiyats".

In the next season it was proposed that the preliminary attestation of the record and the *khanapuri* should be combined into one process, and the *amin* was required to enter both the status and length of occupancy of each tenant. In the rules for 1893-94 however it was provided that all entries of status should be made by the *khanapuri* inspectors. This rule was withdrawn in March 1894 and the only entry of status made at the *khanapuri* was in the remarks column of the *khasau.*\*

The reason that appears to have influenced Government in arriving at this decision was the fear that tenants would not rightly appreciate the importance of the correct entry of status, and might not perhaps understand the meaning of the entries made. During the recess of 1893 Mr. Maude took very great pains to draw up the rules in as complete a manner as possible. I wrote to him as follows:—

"As regard status I cannot see any necessity for an entry by the amin as to a raiyat's status for every field recorded in his name. The Assistant Settlement Officer has each raiyat up before him at attestation in the persence of the Zamindars or his agent and in the presence of his fellow raiyats with all his proofs. A few questions will elicit his status and the Assistant Settlement Officer can record it with his own hand once for all in the Khatian".

On the other hand it was impossible, without a previous entry of status, to prepare separate khatians for the lands held by a tenant under different titles, and in fact Mr. Finucane's rules of March 1892 appears to have contemplated the inclusion of lands of all descriptions in the occupation of a single tenant, even of those held under different landlords in one khatian. The khatians so prepared represented no holding and were incomprehensible alike to landlord and tenant. There can be but little doubt now that by far the best plan would, where the amins could not be trusted to enter status correctly, have been to have left the preparation of khatians to be made in an attestation camp.

403. In the season of 1891-92, amins were absolutely forbidden to make any entry of rent, the revenue officer being required to ascertain and enter the rent himself.

For convenience, however, this order was commonly disregarded, and by the rules for 1892-93 amins were required to enter in the khatian and parcha the rents stated by landlords and by tenant, and to note in the khasra the rate of rent if known.

In 1893 the whole question of the entry of rent and status in the field received the special considration of Government in connection with the Bihar survey, and a long succession of changas were made in the rules.

In August 1893 I gave my opinion that—

"The record of rates of rent in khasra and rentals in khatians by the amins have been useless for the Assistant Settlement Officers's purpose. Such entries are made by the amin in collusion with raiyats and zamindars and have a fruitful source of illicit gains. It has been my experience that zamindars often put one rate of rent of the khasra which if multiplied by the ekpadia area would give a different rental from what is stated in the ekpadia, and again a different one from that entered in the khatian and different from that ascertained at attestation by the Assistant Settlement Officer".

<sup>\*</sup> See also para. 429.

Mr. Radice in a note of the 18th August writes: As to entering rents I would decidedly prefer that they be not entered at all in the khatian. The rayat's ideas of the rent he pays are generally so vague and inaccurate that it is all but useless to record them except at attestation by the attesting officer himself. The rent according to the landlord can best be recorded by insisting on ekpadia papers being filed before the commercement of field operations."

Orders were accordingly passed by Government that all entries of rent should be made by the *khanapuri* inspectors and not by *amins* and these orders were embodied in the Orissa rules. Mr. Maude wrote on this, in his letter No. 2112 of 25th September 1893 to the Director of the Department of Land Records and

Agriculture: -

"You will observe that I have accepted in full the alteration made by the Government rules as to entry of rents by inspectors only, and as to the postponment of all entries of raiyati status until the time of alteration when this function will be performed under the Revenue Officer's own eye. The question whether inspectors can enter rentals with their own hand without the necessity of their staff being so increased as to materially augment the cost of survey is one which the Survey Department will be most fitted to discuss. My own belief is that unless the staff of inspectors be doubled, they can only carry out the order at the expense of their ordinary inspection duties, on the faithful performance of which it will be seen from the rules drafted for the supervision of khanapuri that we must chiefly rely in aiming at a correct preliminary record".

In letter No. 1161 T. R. of 22nd. September 1893 from the Government of Bengal to the Secretary to the Government of India it was laid down that rents and status should, at the *khanapuri* stage, be entered on the *parchas* only by inspectors, and in Government order No. 509 L. R. of the 26th January 1894 the following procedure was enjoined:—

"The rent will be entred by the inspectors after enquiry in the village, and with his own hand, on lists showing (i) names of tenants and landlords, (ii) rent as stated by landlord, and (iii) rent as stated by tenant. The inspector will file these lists with the Settlement Officer or the Assistant Settlement Officer under whose orders he is placed after the entries have been copied into the headings of the parchas. The amin will fill up the columns of the khasra and those in the body of the parcha as the work proceeds, field by field, noting in the khasra against the first field where each tenant's name appears the rent entered in the heading of the parcha. If the amin discovers, during the progress of his work, any discrepancies between the rent entries in the inspector's lists, and actual facts as stated by the parties to him, he will enter what he finds to be the facts in the khasra and in the body of the parcha in red ink, and will note such discrepancies, in a separate paper, for the orders of the inspector or of the Assistant Settlement Officer.

"When either of these officers has passed orders on the discrepancies, the correction (if any) will be made in the headings of the parcha, if the inspector's first figure is wrong; in the columns of the khasra and of the body of the parcha if the amins figure is wrong."

This rule did not come into force in Balasore until March 1894 and only a fourth of the villages of which the records were written during the season were done on this system. Mr. Maude, reporting on the working of the rules in August 1894, wrote:—

"In my opinion the lists are of practically no value and are not worth the expense of any extra munserims. As pointed out in my letter No. 701, dated the 2nd March 1894, to your address, the rule must interfere with the khanapuri work and the provision of the inspectors unless special or extra men are appointed; and the appointment of special or extra men means descending to a lower class of inappators. Every rental has to be gone into again attestation, and it would be better and chapper to leave the entries to be made entirely at that time."

The rule was in October 1894 set aside by the orders of the Government of India, who, in their letter No.  $\frac{3028}{43}$  of the 16th October 1894, wrote:—

"Entry of status and rent at attestation is the old-established practice in Bengal. It appears to have been followed with complete success in Bihar in 1987; and experience has shown that it involves no material additional expenditure either of time or of money. The Board of Revenue, whose advice in a matter poculiarly within their functions must carry great weight, have expressed a decided preference for the continuance of this practice, and in these circumstances the Government of India trust that His Honour the Lieutenant-Governor will agree with them in thinking that its continuance is essential in order to safeguard the accuracy of the entries of rent and status.

"For these reason the Government of India desires that, as the system of entry by the Inspector is not regarded as satisfactory by His Honour the Lieutenant-Governor, the old rule of entry by the Revenue Officer at attestation should be followed, the columns being left blank at khanapuri".

The result was that the preliminary entries have since then been made by the muharir in the attestation camp and not by the amin in the field.

The patwari in Ocissa still exists only in a few estates. He is the Employment of Kanungos, Patwaris and Mahomedan counterpart of the village accountant Chukidars on survey and settlement. (bhoi) of the early Hindu village. He was responsible for the collection of the revenue of the village to the divisional accountant or Bhoimul, the Kanungo of the Mahamedan system. Under British rule his duties and powers were defined by Regulation XII of 1817 and have been further described in the Revenue Officer's Manual. In the settlement of 1833 may patwari jagirs were resumed and it is only in the larger taluks that patwaris are now found. Altogether there are in Cuttack 100, in Puri 321, in Balasore 56. The Kanungos play a far more important part in the district administration of Orissa than the patwaris. There are altogether 45 in the Province, viz, in Cuttack 25, in Balaspre 12, and in Puri 8, besides three chief, or sadar Kanungas. Each Kanungo has a circle or chakla, comprising two or more Parganas, and within this area he collects rents from the tenants of Government and cesses from petty proprietors, maintains a record of proprietary rights, reports on all local calamities, fluctuation of prices of food grains, and other matters connected with the local revenue administration, and make such local enquiries as are ordered by the Collector of the District.

Proposals for utilising the services of Kanungos and patwaries in the Orissa survey and subsequently for the maintenance of the land records were made by Mr. Finucane in 1888 and were accepted by the Board of Revenue in their letter No. 973 A. of the 17th December, 1889.

The Government of Bengal in a letter No. 270, dated 22nd. January 1890, expressed entire approval of the scheme and urged that every effort should be made to overcome any difficulties that might be encountered. Survey schools for the training of *Kanungos*, patwaris and village headmen, were started in Cuttack, Puri and Balasore under the control of Mr. Patterson, the Deputy Superintendent of Survey, and 328 patwaris obtained certificates.

Orders were passed by Government in their letter No. 339 L. R. of the 16th March 1891 approving of the proposal of the Board to place all patwaris, Kanungos, and Chaukidars under the control of the Settlement Officer, who for his purpose was vested with the powers of a Collector under Regulation XII. of 1817.

The kanungos in the Puri District were accordingly placed at the disposal of the Settlement Department and relieved of their ordinary revenue duties. They continued however to be paid from the general administration funds, and it was stipulated that they should carry out any written orders sent them by the Collector of the district.

In Cuttack the Collector expressed his inability to give up the kanungos until he should be provided with substitutes, and in their letter No. 397 T.R., dated 21st. September 1891, the Government of Bengal sanctioned the appointment of a special establishment to perform the ordinary duties of kanungos while the latter were on deputation with the Settlement Department.

In accordance with these orders 25 out of the 26 kanungos of Cuttack and all the 13 kanungos of the Balasore District were placed absolutely at the disposal of the Settlement officer and received their pay from the Settlement budget.

The sadar kanungos were employed at the headquarters, and their acquaintance with the records of the old settlement enabled them to render services of great value.

The other kanungos were employed partly at the headquarters in supervising the preparation of draft khewats and comparative statements, and partly under the Assistant Settlement Officers in the field. Their work was not found satisfactory, and in October 1892, Mr. Walsh wrote:—

"On the whole, however, I am strongly of opinion that their agency has not been nearly so effective as an agency of specially appointed muharrirs or munserims appointed by the Settlement Department, and I would strongly recommend that their services be returned to the regular line, and in their place the amount of their salary be placed to the credit of the Settlement budget for the appointment of special munserims to discharge the duties on which the deputed kanungos are now employed or which may be allotted to them. The expense is Rs. 13,200 per annum. This amount, if credited to the Settlement Budget, would procure a far more efficient agency for the purpose, and the services of these officers might be returned to the Collectorate."

<sup>\*</sup> Vide para 331.

In November 1892 the Collector of Cuttack raised objections to the employment of Kanungos otherwise than on field work within their own circles. The adoption of his views still further limited the usefulness of the Kanungos and in a letter No. 1665 dated the 8th July 1893, Mr. Maude wrote as follows to the Commissioner of the Division:—

"Not only is the Settlement Officer unable to get full value for the money spent in maintaining the kanungos, but such work as they can be put to is given grudgingly and under constant compulsion, and with the idea that they are not in reality responsible to the Settlement Officers. I should be unwilling however to lose their services altogether, as some of them do really useful work when in the mufasal, where they have of course the great advantage of local knowledge. Both Mr. Nathan and Mr. Radice and the other Balasore officers have kanungos working under them at the present time and they are doing work in these districts. In these circumstances I would strongly advocate that, if practicable, the system prevailing in Puri may be extended to Cuttack and Balasore, that is to say that the services of the kanungos may be again made over to the Collectors and the acting mem abolished, but that they may receive orders to work under and assist the Assistant Settlement Officers whenever work is actually going on in their chaklas. By this means a great saving will be effected to the settlement budget, the duality of control will be done away with and the Assistant Settlement Officers will, at the same time, secure the service when required of such kanungos as are able and willing to help them. The system has worked so far in Puri and I see no reason why, if the Collectorate and Settlement Officers are in harmony, it should not work equally well in the other two districts.

If however this is considered to be impracticable I would recommend that the kanungos be handed over again to the Collectorate and the money now spent by the settlement on their maintenance be devoted to such substitutes as may be necessary. We should then at least have an establishment by the reduction of which we could economise when the full number is not required, and out of which we could exact strict obedience and a full tale of work, consideration which I consider far outweigh the local knowledge possessed by some of the kanunges".

These opinions were accepted by the Commissioner and the Director, and in a letter No. 1532 A. of the 11th November 1893 the Board of Revenue ordered that the *Kanungos* should revert to general duty, but that when settlement work was going on in his *chakla* a *Kanungo* should lend such assistance as might be required of him. All the *Kanungos* were allowed to revert at once except 1 in Cuttack, 2 in Puri and 9 in Balasore. Six of those in Balasore were retained till the end of the work and with one exception did extremely good work.

I found them thoroughly trustworthy. They possess a complete knowledge of the last settlement records and a great deal of local knowledge. The work done by Baistabunand Mahapatra and Hari Misir deserves special recognition. The former supervised copying and classification of some 2.000 records, and the latter did exceptionally good work in several assessment camps.

405. The employment of *Patwaris* appears to have been even less successful than that of the *Kanungos*.

In June 1891 Mr. Reily wrote:-

"The Patwaris I have seen at work are only turning out three to three and a half acres a day that is, about 100 acres a month. It is true that we are getting the Patwaris' services free, but we are paying the chainnen, and if the Patwari only turns out 100 acres a month, the chainmen are costing us an additional Rs. 12-8-0 for every 100 acres. It follows that every 100 acres surveyed by a Patwari is costing the state Rs. 12-8-0. A paid amin, however, can do 10 acres a day or 300 acres a month, and for this he is paid Rs. 3 per 100 acres. To the Rs. 3 per 100 acres will have to be added the Rs. 3-12-0 for chainman per 100 acres. Therefore the paid amin who can do 10 acres a day though he is paid Rs. 3 per 100 acres, costs the State only Rs. 6-12-0 per 100 acres, while the 100 acres done by unpaid Patwari is costing the State Rs. 12.8-0 per 100 acres. It would seem therefore to be far cheaper to employ paid labour than utilise the incompetent free labour of the Patwaris."

Their work does not appear to have improved much as time went on, for in the annual report for 1891-92 Mr. Walsh wrote:

"The reports given by circle officers regarding their work are very unsatisfactory. On account of the difficulty of obtaining control over them or enforcing orders to procure their attendance the *Patwaris* have been of comparatively little assistance in either Puri of Cuttack."

Meanwhile in Balasore the *patwaris* proved even more intractable. In spite of the establishment of Survey Schools at Bhadrak and Ealasore, they would not attend, and up to the end of August 1893 only six out of 56 were reported to be duly qualified in survey.

Only two were employed in the *kanapuri* in 1892-93, while five put in an appearance for a few days in the recess of 1893:16 were employed on attestation, but appear to have attended very badly.

The attempt to use the *Patwaris* was indeed an utter failure and was quietly dropped. They were too well off and had too long enjoyed a practical independence to willingly accept the hard work and rigid routine of an amin's life, and Government wisely abandoned the attempt to exact its quota of service and contented itself with making the patwari pay rent for his land as will be described hereafter.

406. The services of the village watchmen or Chaukidars were requisitioned for the purpose of summoning Utilisation of Chaukidars. tenants and dragging chains, &c. They received no pay while in their own villages, but if taken outside them were given a subsistence allowance.

Difficulties cropped up at the very outset. In May 1891 Babu Chakulal Sirkar, the khanapuri officer of Tangi Circle reported that most of the Chaukidars' beats extended over more than one village and that they were expected to attend at one and the same time on more than one amin; that the local police had persuaded the Chaukidars that they were not bound to obey the orders of the Settlement Officers, and that the amins themselves were disinclined to use the Chaukidars as chainmen, lest by so doing they should be debarred from making their expected profit, while the tindals objected to pulling chains with men of such low caste

Again in June, 1891, Mr. Reily wrote:—

'The services of these Chaukidars have been utilised on the strength of orders, or rather a wish expressed by His Honour at the conference held at Cuttack in January last. I think it would be well if His Honour would express in writing his desire that the services of *Chaukidars* should be used in survey work. There is no doubt that very great difficulties are placed in my way. The police are very much opposed to it, and it is but natural that they should be, as they are deprived of the services of *Chaukidars*. The Survey Department are opposed to it. The *amins* dislike it, as these *Chaukidars* are mostly low caste men, whom these *amins* pretend they cannot touch. The *Chaukidars* themselves are opposed do it."

In August 1891 a circular letter was issued by the Deputy Inspector-General of Police desiring the District Superintendents to issue positive orders to all their subordinates that the Chaukidars should serve as chainmen or render any other assistance in the survey work when called upon by the Settlement Officer.

At this time Chaukidars were made to serve outside their villages, though never at a distance of more than three miles; but in 1893 orders were passed by Magistrate of Cuttack that they were on no account to be employed outside their own villages.

In spite of this restriction and the positive orders issued from hadquarters the difficulties appear to have subsisted to the last, for in May, 1893 Mr. Maude wrote to the Magistrate of Balasore complaining that "the Police of that district refuse to assist when required in the serving of processes or warrants."

Khanapuri being over, comparatively little assitance was required from the Chaukidars, and in the stages of attestation and settlement of fair rents they have usually done willingly enough the little that was expected of them in the way of summoning tenants, or helping to re-measure with the padika-one of their customary duties.

Besides these three classes of kanungos, Patwaris and Chaukidars, it appears to have been thought that the village headmen (muqaddams) and the sarbarahkars could be compelled to assist in the survey, and they were called upon to qualify themselves in the training schools; but when it was found that they possessed quasi-proprietary rights the proposal was abandoned.

407. The form of khasra first in use contained a column for the old bhauria number, i.e., for the number assigned to the plot in Identification of last Settlement fields. the bhauria or field book prepared in the last settlement. It was not however an easy task to identify the present survey with the last settlement fields. The amins had not got the old bhaurias and were dependent on the zamindars and tenants for their information and the latter very often did not know the numbers. Even if a copy of the bhauria was produced the process of relaying it was tidious and difficult, all measurements having to be referred back to some landmark that could be identified even after 50 years. The result was that in August 1891 there complaints from Assistant Settlement Officers that the old numbers had not been entered and that the attempts made to write up numbers in the survey office had not been successfulIt was decided that the numbers should be entered at attestation by the settlement muharrirs, but, during his visit to Orissa in February 1842, the Director ruled that the identi ication of the last settlement survey number was unnecessary, and in 1892-93 the column for old bhauria number was omitted from the khasra. Had it been possible to get an accurate record of the bhauria numbers they would certainly have been of the greatest use in the identification of revenue-free and privileged lands, but the expense of the identification would have been absolutely prohibitive. The bhauria has been used a good deal in the settlement of boundary disputes and other claims, the expense being paid by the disputants, and in a few villages almost the whole of the khanapuri has been revised after the identification of the last settlement fields.

One very large village in Cuttack, Nagpur, containing about 7,000 fields, was attested in this way at a cost of Rs. 140 paid by the proprietors, and all parties

appear to have been thoroughly satisfied.

408. The general principle followed has been to give the amin no power whatever of deciding disputes, it being certain that most of them would use such power to extort

gratifications from the villagers.

At first the amins were required to leave blank every disputed entry, entering the substance of the dispute on the dispute list for the orders of the revenue officer

and encircling the blank space with a red line.

It was however found to be impossible for a revenue officer to deal with all disputes while the *khanapuri* was going on, and in the season of 1892-93 the rule was for the *amin* to make the entry that appeared to him correct, encircling it with a red line and recording the substance of the dispute in the dispute list. This was again modified in the case of entries in column 7 of the *khasra*—name of raiyats and under-raiyats—the entry being left blank by the *amin* and subsequently made in accordance with the orders of the inspector. This is the procedure laid down in the final edition of the rules.\*

The Khanapuri officer when visiting a village was expected to decide all pending disputes, to check and revise the inspector's orders, and in addition to this to examine the records and check a few entries. With 100 to 500 amins or more in the field it was obviously impossible for him to cope properly with the work, and except in Balasore when there was a very strong staff who enjoyed the benefits of the experience gained in Puri and Cuttack, the decisions were at best extremely summary and formed little more than a basis for the drafting of the record.

409. The determination of village boundaries is governed by Rule 4, Chapter VI of the Rules under the Bengal Tenancy Act, which runs as follows:—

"4. (a) In the demarcation of village boundaries care shall be taken to preserve, as far as possible, for the unit of survey and record, the area contained

within the exterior boundaries of the village maps of the revenue survey.

(b) Where there is no dispute the boundary of the village according to possession should be followed, and where that boundary does not differ substantialy from the boundary of the revenue survey, the latter need not be separately shown in the map.

(c) Where there is considerable difference between the boundary according to the revenue survey map and the existing boundary of the village as a certained by the Revenue Officer, the latter should be followed for the purposes of map and record, but the boundary of the revenue survey map should also be marked on the new village map.

(d) Where there is a dispute as to village boundaries, the Revenue Officer.

shall decide the disputes under the Bengal Survey Act V. (B. C.) of 1875".

The rules drawn up by Mr. Reily for the guidance of *khanapuri* officers in 1891-92 provided that the Survey Department should send to the circle officer lists of all boundary disputes with disputes traces.

That the circle officer should arrange these disputes in local groups, complete the traces, and depute a kanungo to the spot to enquire and settle the

dispute if possible.

That in all cases where the area in dispute was over 50 acres, or where the kanungo failed to arrive at a settlement, the circle officer should himself proceed to the spot and decide the case after local enquiry and record of evidence.

A good deal was however left to the discretion of the circle officer and the procedure varied considerably.

If at the *khanapuri* stage no decision had been arrived at, a separate set of numbers were given to the fields in dispute and a separate *khasra* and *khatian* prepared; the records of the villages being completed after their return from the Settlement office to the survey camp.

It was held by Mr. Maude that no boundary disputes could be instituted after the close of the *khanapuri* and that claim; put in at the time of attestation should be dealt with as ordinary objections.

His orders were generally interpreted by Assistant Settlement Officers to mean that the exterior boundary of a village could not be altered save by an order under the Survey Act V of 1875, and the correction of the records at the time of attestation was generally made by creation of new tahsilalahidas. It has, however, been subsequently held that an Assistant Settlement Officer framing a record under the Bengal Tenancy Act has power at any stage of the operations to enquire into disputes as to the village within which any lands are situated and in cases tried formally under section 105 and section 106 a good many external boundaries have been changed.

Besides the ordinary disputes between villages in the Moghulbandi, it has been necessary to deicide a good many between the temporarily settled and the permanently-settled area, and some between the Moghulbandi and the Tributary States. In the early correspondence it was laid down by the Board of Revenue, that the Survey and Settlement officers could survey the entire boundary, reporting disputes with Tributary Mahals to the Superintendent for decision under Act XX of 1850.

In 1892-93 a procedure was agreed upon whereby in evry case of a dispute with a Tributary Estate an enquiry should be made by an Assistant Settlement Officer in conjunction with an officer deputed by the Superintendent of the Tributary Mahals, and the result of their enquiry reported to the latter officer for a decision. In accordance with these orders reports were submitted by Assistant Settlement Officers as to the boundaries of Nilgiri and Keonjhar in Balasore district, and of Keonjhar, Dhenkanal, and Atgarh in Cuttack, and have been decided by the Superintendent. Generally the revenue survey line has, as far as possible, been followed, but the maps of the wilder portions being on the scale of 1" = 1 mile only, it has been difficult to relay them with any great degree of accuracy and the parties have generally agreed to a fairly straight line.

The Balasore disputes are by far the most important and unfortunately owing to the omission to give effect to the so-called monocasa decisions in the revenue survey maps they had to be re-opened in 1833. These were decisions given by competent authorities, before the final completion of the Revenue Survey proceedings, which modified boundaries as laid down in the Revenue Survey maps.

Act XX of 1850 having in the meantime been repealed by Act XI of 1893 the powers of the Superintendent were such as he holds under clause 10 of the sanad, and the Settlement Officer was vested with powers of a Commissioner under clause 10 for the purpose of deciding their disputes, an Assistant Settlement Officer and the Dewan of Mohurbhanj being appointed as assessors for the purpose of the preliminary enquiry.

The survey village.

The papers of the last settlement and was demircated accordingly. As to the disadvantages of this system I here quote from Mr. Reily's letter No. 27 T. P. of the 29th June, 1891:—

"Unfortunately, however, the demicration has been hitherto done in accordance with the boundaries given in the old Settlement papers and not in accordance with the revenue survey records. The truth is that all the registers in the Collector's office, as well as all proceedings taken in connection with sales, batwaras or transfer of property, the boundary and area of the property has I believe, always followed the old Settlement papers, and not the revenue survey records. In Bengal the Collector's registers have been based on the revenue

<sup>\*</sup> Board of Government, No. 781 A., dated 3rd October, 1891.

survey records and the thakbust map. In Orissa, however, no thakbust survey was ever made, the old Settlement papers taking their place. The revenue survey maps in Orissa were thrown aside as next to useless, and the Collector's registers have been written up in accordance with the old survey papers. It may be said that, seeing that the boundaries as given in the old Settlement papers are familiar to all concerned, it would have been as well to keep to these boundaries, and not those laid down by the revenue survey records. Apart from the fact that a departure of this kind would require the special orders of Government, I am not prepared to recommend this arrangement. To separately demarcate and traverse each detached block detailed in the old settlement papers, would, in my opinion, put Government to much useless expense. Not only would the cost of the demarcation be needlessly increased, but the cost of the traverse survey and stone-embedding would be raised to three or perhaps four times the sum it would cost if we adhered to the revenue survey records.

"If we demarcate each separate village or detached block, in many cases consisting of a few acres, as detailed in the old Settlement papers, we should have to traverse over 16,184 separate villages in Cuttack, and 3,784 in Puri; while if we adhere to the revenue survey records, the number of villages to be traversed would be only 4, 188 in Cuttack and 1,430 in Puri. It will be seen that the amount of traverse work to be done would be reduced by one-fourth and the stone-embedding would also be reduced to one-eighth of the amount that would be necessary if we followed the old Settlement papers."

Meanwhile the practice of the Survey Department varied in different areas. In the Tangi Circle the tahsilalahidas found Within the exterior ambit of the revenue survey village were treated as so many separate villages, a note being made against the numbers in such tahsilalahidas that they were transferred to the village the name of which they bore and details as to area, &c., left blank. In Furi district we find from Mr. Walsh's reports that the practice was to give independent serial numbers to the plots included in the tahsilalahidas and to prepare a separate khasra, so that each tahsilalahida was practically treated as a separate village, but without any necessity for reduplicating numbers.

Some correspondence followed between the Survey and the Settlement Departments and in his letter No. 682, dated the 5th December, 1891, Colonel Sandeman, the Deputy Superintendent of Survey then in charge of the Orissa party, wrote:—

"Let us suppose there are two mazzas and in the latter there are two portions of A. The map of B will be numbered throughout and the fields in the portions which belong to A. will find their proper places in the khasra of B in which their proprietary (sic) and the fact of their being a portion of A will be recorded. When the khatians of A and B are prepared, they will be by rights omitted from B and find their places at the end of the khatian of A."

With the modification that the separate khatians prepared for the tahsilalahidas of A continued to be kept with the records of B, this order remained in force until the conclusion of the survey operations, though it was variously interpreted. Generally the traverse took as their unit the existing "mausa" as pointed out by the villagers and plotted the village on a 4" scale. Comparison was then made with the old 4" maps of the revenue survey, and whenever any differences appeared they were ordered to be noted for the information of the Settlement Department. Actually very few notes of such discrepancies appear to have been recorded. All tahsilalahidar blocks over 50 acres in area were separately traversed, but not plotted separately. In 1893, at the instance of Mr. C. A. Radice, the Survey were asked to demarcate on their maps the boundaries of estates as being practically equivalent to tahsilalahidas, but the question being considered by the Director during his visit to Orissa in August 1893 he recorded his opinion as follows:—

"Mr. Radice is said to have asked that boundaries of estates should be marked on the maps. But estates are often not compact. I do not think that this should be attempted. It is enough to mark the tahsilalahida boundaries on the maps,"

Accordingly the attempt to demarcate estates was abandoned, but there were many practical difficulties, and in spite of the repeated orders to reconstruct the revenue survey villages it was often found impossible to do so.

In 1893 a suggestion was made that in the case of large villages the unit of survey should be the hamlet, "tolah" or "sahi". But Mr. Maude in his letter No. 1093 of 20th April, 1893 to the Director of Land Records reported that it was too late to effect any change in the existing rules. As a matter of fact the Survey Department had in several cases made into separate villages the hamlets included in one revenue survey village, as in the case of mauza Bidyadharpur of Pargana Bakhrabad now surveyed as three separate villages.

To explain the difficulty of following either the revenue survey or the records of the last settlement it is necessary to give some account of the term village" as used in Orissa.

From an early time there appears to have been confusion between the terms "mauza" meaning village, and "mahal" meaning estate. Each pargana originally contained a certain number of taluks or estates and each village belonged to one or the other of these taluqs.

Then came divisions, sales and other exchanges of lands, so that the proprietor of village A, of estate X, became possessed of lands in village B, belonging to estate Y, and for convenience collected rents from these lands along with those of village A.

In the last settlement these lands were treated as forming part, not of estate X only, but of village A, and in the measurement papers of village B would be described as "tahsilalahida" or "separate collection" lying in B, but belonging to A and would be excluded from the area of village B as dakhilkharij lands, i.e., lands transferred from B to A. Sometimes the amins went further and measured such isolated plots ("dianchaks") as part of the village to which they had been transferred, the land finding its place in the field book of A and being entirely omitted from that of B. In this case the settlement papers would not show the existence of the isolated plot in village B. Though it would appear in the revenue survey map. The same thing might happen within one estate also if the landlord's agent or the tenure-holder who collected the rents of village A also collected those of certain lands in village B. Again portions of villages might be alienated by sale or gift or become separate estates though not with the dignity of a taluk. The area of these lands would be excluded from that of the villages of the talug and each such portion would be a tahsilalahida, or a "dianchak". Often the Settlement Department lumped together a number of such portions and created of them one village, but this was by no means always the case.

This is a general account of the origion of the revenue villages of Orissa, but the nomenclature was by no means always consistent and what appears to have been practically done was to follow the zamindars' papers with all their inconvenience and inconsistencies.

In the present settlement it was desired really to find the gram or village locally known by one name and included within one periphery.

This in most cases is shown in the rakba jama-kharach or statement of village areas prepared at the last settlement, in the Collector's mauzawar register and in the revenue survey maps. In the area statements however of both the last settlement and the revenue survey the unit for which details were given was the revenue village and sometimes the local village or gram was not even mapped. In such cases the present survey followed the boundaries as pointed out by the villagers.

To illustrate the confusion that was possible I have given in Appendix D extracts from the records of village Ahyas, the most complicated that I have met with. At the revenue survey the lands of 32 villages were mapped on one sheet. Appendix D reproduces the revenue survey area statement for a single one of these component villages. Appendix D 3 shows the same village as given in the Collector's mauzawar registers while Appendix D 4 is an abstract of what is known as a tahsilalahida statement or comparative table of past and present areas of whole villages such as has now been prepared for every village in the Province. It will be seen that on the present survey sheets have been mapped the lands of 52 original villages mauzas now owing to division of estates shown as 111, and 40 tahsilalahidas. In the C register 296 tahsilalahidas are shown, but the present records have been simplified by including most of them without any distinction in the villages shown in column 5 to which they appertain. Appendix D 1 shows a tahsilalahida statement of a moderate sized village containing, according to the Collector's mauzawar register, lands of one taluk and a single tahsilalahida.

411. The procedure for the writing of khewats is governed by Rule 9, Chapter VI. of the rules under the Bengal Tenancy Act which runs:—

"(a) The proprietary khewat shall show the character and extent of proprietary interests; and when there are large tenure-holders, the character and extent of whose interests may, in the opinion of the Revenue Officer, require it, such interests shall be recorded in a similar form in addition to being recorded in the khatian."

"(b) The khewat of proprietary interests shallfirst be drawn up in accordance with the registers maintained by the Collector under the provision of the Land Registration Act VII (B. C.) of 1876. As the record-writing proceeds the proprietary Khewat shall be corrected in accordance with the facts of possession."

For this purpose it was necessary to supply the Survey Department with copies or extracts from the Land registration Registers, and it appears that copies were indeed taken in May, 1891 but were mislaid, and the amins took the field unprovided with any means of checking the landlord's statements.

No khewats were prepared in the field in 1891 and the resulting inconvenience is well set forth in a report by Babu Chaku Lal Sifkar, one of the circle officers, which is here quoted:—

"The want of a Khewat is causing much inconvenience, for I am often in the dark as to whether the mauza under survey is held under a temporary or permanent lease, or whether it forms part of a revenue free estate".

"I am therefore working entirely in the dark as to the interests of the landlords and many subordinate tenure holders in the tract under my jurisdiction. I have to trust entirely to such information as I can gather from the landlord's agents and others in the mufasal".

In order to remove these difficulties, rules for the preparation of khewats were drawn up by Mr. Reily for the season of 1891-92, but the scheme broke down and the khewats were either prepared in recess by the Survey Department without the aid of the Settlement Officers, when they were generally little more than copies of the Collector's registers, or they were written in the field at khanapuri or preliminary attestation, and were a record of mauzawar possession without reference to the names of the persons recognised by the Collector as proprietors of the estate. The difficulties met with are set forth in the following extract from a letter, No. 678, dated 18th November, 1892, from the Deputy Superintendent of Survey to the Settlement Officer:—

"The preparation of draft khewats is not ordinarily a duty of the Survey Department, and hitherto we have always been supplied with draft khewats before commencing khanapuri. Last season, however, owing to the failure of the Settlement Department in supplying these draft khewats, it was decided in April that the draft khewats should be prepared by the Survey Department for the remainder of the season. We were then (i. e., during last week of April) supplied with blank forms of khewat Part II, and form 19 (khewat Part IV Tenure-holders), but no instructions as to their filling up, although asked for, were given. These forms were issued to the khanapuri amins who prepared, the khewats in the field. Copies of the Collectorate registers were not supplied till late and comparison had therefore to be made after the field season had closed.

"Draft khewats Part I were supplied by the Settlement Department, but as these were made out mahalwar they were useless to us in that form and had to be made out mauzawar. This was done in the case of such mauzas as we could identify on the mujmilli map, but the kharij-dakhil portions could not be traced. The mauzas we could identify were sent out into the field and the kharij-dakhil portions are now being sent to the Assistant Settlement Officers to file with the mauzas to which they belong.

'The forms of khewat Part III were not received till after the close of the field season."

In the next season, 1892-93, draft *khewats* were prepared by the Settlement Department from the Collector's general registers of revenue-paying and revenue-free land and were supposed to be attested at the time of *khanapuri*. *khewats* so prepared were however but little better than rough drafts, and in 1893 elaborate rules for the attestation of *khewats* were drawn up by Mr. Radice and approved by Mr. Maude, and with some modifications were eventually incorporated in the attestation rules printed in Appendix B.

The principle of the rules was that for each revenue-paying estate a *khewat* should be prepared based on the entries in the Collector's land registration register A, as corrected by the mutation register D. That no mutations or corrections in the names or shares recorded in the Collectorate should be allowed save under the orders of the Assistant Settlement Officer, and that all such mutations should be reported to the Collector to enable him to take action under Act (VII B. C.) of 1876.

From this mahalwar khewat was to be extracted the muzawar or village khewat.

There was a good deal of discussion as to the proper method of dealing with cases where, owing to some private and unregistered arrangement, the proprietorship of the village differed from that of the whole estate, and as far back as 1893 it was decided that as all the registered proprietors had under the Land

Registration and Tenancy acts the right to sue for and recover rents, even in the villages in the sole possession of a single co-sharer, they must all be recorded; but that where the interests of the proprietors in a particular village were clearly proved to differ from that in the estate as a whole, a note should be made of the fact in the remarks column of the *khewat*.

Unfortunately these orders came rather late and were not always understood, so that many of the *khewats* were records of ownership in the village only, while in every circle the *mahlwar khewats* were left sadly incomplete.

Strenuous efforts were made at the time of settlement of rents to complete and correct all the *khewats*, but it was found very difficult to procure the attendance of all the zamindars, and when it came to taking *kabuliyats* for the payment of revenue so many mistakes were found that in December, 1897 after a conference with the Director of Land Records it was decided:—

That the *khewats* framed at attestation should not be finally published.

That at the time of taking kabuliyats the mahalwar khewats should be finally corrected and the notes as to differences of possession in particular villages verified by the kabuliyat officer.

That from these mahalwar khewats fresh village khewats should be prepared and after final publication in the village bound into the volume of the record of rights. It is hoped that by this means a maximum degree of accuracy may have been attained while still complying with the provisions of the law as to final publication.

There have been many forms of *khewat* in use at different times, but under the last rule they will all, except in parts of the Puri District, be in a form which differs chiefly from that given in Appendix G of the Survey and Settlement Manual of 1895 in that area is divided into "Assessed", "Unassessed" and not into "Cultivated," "Uncultivated," and that the *mufassal* assets of the village and not the *sadar jama* of the estate are shown.

Besides this *khewat* of revenue-paying estates, *khewat* Part I, three other *khewats* are prescribed by the Survey and Settlement Manual and were prepared in the early years of the operations.

Khewat Part II, is a khewat of revenue-free estates and under the instructions originally issued by Mr. Reily should have been prepared from the Collector's Land Register B, and corrected at the time of khanapuri. This, however, was not done, and in the attestation camps this khewat was generally discarded in favour of a comparative statement of revenue-free lands. It continued however to be copied from these statements until the visit of H. H. Sir Charles Elliott to Orissa in March, 1894, when, under his orders, it was discontinued. Full particulars regarding revenue-free lands are entered in the final records and have been finally published.

Khewat Part III corresponds to the Land Registration Register B, Part II, of lands occupied for public purposes. It was supposed to be prepared at the time of attestation and Assistant Settlement Officers were enjoined to take particular care in verifying the contents. It was not a convenient form and its preparation appears to have been abandoned in 1894, and the form is now rarely to be found in any record and has not been included in the record of rights. Full particulars regarding the lands occupied for public purposes are however entered in the final records, and registers prepared for each department have been made over to the Collectors and to the Departments concerned.

The tenure-holders' khewat was originally prepared in form No. 19 of the Survey and Settlement Manual of 1888 for all muquddams and other proprietary tenure-holders. It was not however decided until 1898 who were to be considered as proprietary tenure-holders and the form was by no means always filled up even in villages where there were muqudams or sarbarhkars. In 1896 a form was devised for Orissa and was prepared for a good many villages at the stage of settlement of rents, but this in turn gave way to the form which was prepared at the time of settling revenue, revised when taking kabuliyats, and after final publication bound up with the khatians in the volume of record of rights.

412. The following figures taken from the returns of the Survey

Outturn and cost of survey
and record writing.

Department will show the annual progress and cost
of survey and of the khanapuri or preliminary

writing of the record. They do not therefore show the cost of supervision by the officers of the Settlement Department, which was heavier in the later years owing to the greater number of Assistant Settlement Officers employed, but it is practically impossible to separate the charges on this account from those for attestation to which the whole amount is therefore debited:—

413. The following is a statement by districts showing the progress of the major operations from the beginning:—

		AREA COMPLETED IN SQUARE MILES.				
DISTRICT.	Survey year.	Traverse Survey.	Cadastral Survey.	Record-writing.	Topographical Survey with village boundaries.	
Puri	1889-90 1890-91 1891-92 1892-93 1893-94 1894-95	413 481 135  123	358 364 307 105†	358 364 307 105	  162	
Cuttack	1890-91 1891-92 1892-93 1893-94 1894-95	501 1,286  15 646	331 1,453 <b>§</b> 485	279 1,164 826  5	  661	
Balasore ,	$\left\{\begin{array}{c} 1891-92\\ 1892-93\\ 1893-94\\ 1894-95 \end{array}\right.$	588 1,145  19 <b>0</b>	1,084 649	1,069 664	  190	
Total	•••••	5,523	5,141½	5,141½	1,013	

414. The amounts expended from 1889 to 1895 are as follows:—

		TOTAL SUMS EXPENDED.					
·	•	Traverse Survey including demarcation and stone-embedding.	Cadastral Survey including maps and areas.	Record-writing.	Other heads including Topographical Survey with boundaries,	TOTAL.	
		Rs.	$\mathbf{Rs}_{ullet}$	$\mathbf{Rs}_{ullet}$	${ m Rs}_{ullet}$	$\mathbf{Rs}_ullet$	
D :	1890-91 1891-92		<b>47,132 33,696</b>	10,413 9,453	1,8 <b>50</b> 13,529	79,082 66,436	
Puri	1892-93 1893-94 1894-95	•••	<b>4,</b> 998 <b>3,032</b>	3,454 3,261	776	9,228 6,293	
	( 1094-99	3,962	336	510	<b>4,70</b> 8	9,546	
	Total	33,407	89,224	27,091	20,863	1,70,585	
Cuttack	1890-91 1891-92 1892-93 1893-94 1894-95	22,388 47,880 3,794 798 13,953	34,682 1,10,666 59,427 6,277	9,399 39,980 76,5 <b>67</b> 32,568 814	3,548 15,286 1,371 374 6,219	70,017 2,18,812 1,41,159 33,740 27,263	
	Total	88,813	2,11,052	1,59,328	<b>26,7</b> 98	4,85,991	
Balasore	1891-92 1892-93 1893-94 1894-95	17,740 49,601 842 3,823	79,992 50,527 9,991	33,723 <b>4</b> 5, <b>0</b> 96 3,92 <b>0</b>	 47 1,767	17,740 1,63,363 96,465 19,501	
	Total	72,006	1,40,510	82,739	1,814	<b>2,</b> 97, <b>0</b> 69	
GRAN	D TOTAL .	1,94,226	<b>4,40,</b> 78 <b>6</b>	2,69,158	49,475	9,53,645	

N. B.—In paragraph 622 the cost is returned at Rs. 9,43,091, but some of the cost in column 5 above was incurred in permanently-settled areas.

<sup>†</sup> Revision.

<sup>; 13</sup> square miles of overlaps on Madras excluded.

<sup>§</sup> Of this 364 is revision.

<sup>\*</sup> See however Chapter XXV.

415. The following table shows the cost rates per square mile in the three Districts. P. stands for Puri; C. for Cuttack; and B. for Balasore.

## COST RATES PER SQUARE MILE.

		For	Traverse Survey.	For Cadastral Survey.	For Record-writing	g. BEMARKS.
	(P.		<b>40·</b> 9	68 <b>·5</b>	28• <b>4</b>	
18 <b>90</b> -91	₹ C.	•••	42.7	<b>76</b> •6	<b>29·</b> 3	
	(B.	•••	Nil	•••	•••	
	(P.	•••	58 <b>·4</b>	<b>109·</b> 8	3 <b>0·</b> 7	
	C.	•••	38.2	<b>(</b> 88•8	36.7	
<b>1891-9</b> 2	Ì			$\begin{cases} 33.9 \ (a) \end{cases}$	31 <b>0</b> (a) (a)	i) Revision survey of 1878-79.
	ĹB.	***	24.2	•••	•••	
	(P.	•••	•••	$\left\{ egin{array}{ll} 11.5 \ 43.4 \ (c) \end{array}  ight.$	•••	
<b>18</b> 92 <b>-</b> 93	∤σ.	•••	•••	65.7	46.1	
	1			∫ 56.0 (a)	38 <b>·5</b> (b)	(b) Arrears.
	(B.		47.1	68.8	<b>34.</b> 6	·
•	{P.	•••	•••	•••	27 <b>·0</b> (c)	(c) Temple lands.
1893-94	₹ 0.	•••	<b>53-</b> 2		29 <b>·0</b> (d)	(d) The rate of revision survey.
	(B.	•••	•••	<b>75.2</b>	70.0	
	(P.	•••	32·2 (e)	•••	•••	(e) Traverse
1894-95	₹C.	•••	21.6 (e)	•••	***	Survey 2" Scale.
	(B.	•••	20.1 (e)	•••	•••	

The total cost of the survey and record-writing varied from Rs. 137 per square mile in Puri in 1890-91 to Rs. 199 per square mile in Puri in 1891-92.

The high rate for cadastral survey in 1891-92 may be accounted for by the difficulty of getting any decent work out of the local patroaris and amins, and that of traverse partly by the difficult nature of the country.

Comparison with other surveys.

416. Taking the years 1891-95 the mean annual cost rates in Bihar work out to—

Traverse, &c. Cadastral Survey Record-writing	•••	***	••	67 68
3		1	Total	. 168

For Orissa the average expenditure on these operations in the 5 years of 1890-95, during which the survey was in full swing, came to—

				168.
Traverse, &c.	•••	•••	•••	- 38
Cadastral Survey	•••	•••	4 A 4	93 56
Record-writing	***	•••	•••	
			Total	187*

The greater cost in Orissa may be said to be due almost entirely to the difference in the cadastral survey; and this may be accounted for by the acknowledged inferiority of the Uriya amin-

<sup>\*</sup> In the purely temporarily-settled areas the cost works out to Rs 181 per square mile, see end of paragraph 623.