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Revenue Department

Minutes of Consultations

7th July 1857

Back Numbers 15 - 16

Order No 676 dated 4th July 1857

பரத்தரப்பு பிரிவு – 1.

செப்பனிடுபவர் பெயர்

செப்பனிடுவதற்காக எடுத்துக் கொள்ளப்பட்ட நாள்.

செப்பனிட்டு முடித்த நாள் 7/1/07

வரைபாக்கும் முதல் பு.நி.பா.எ. கையொப்பம்

பரிசோதனையாளர்க்கும் பு.நி.பா.எ. கையொப்பம்

அதிகாரி – உதவியாளர் கையொப்பம்

Fort Saint George, Revenue Consultation of 7th July 1857.

No. 15. Read the following Extract from the Proceedings of the Board of Revenue; dated 15th May 1857, No. 1603.

Read again letter from the Collector of South Arcot 24th February 1857,* No. 41, forwarding with remarks Captain Priestley's report on the survey operations in South Arcot.

**In Cons. 13th March* 1857, *No.* 813.

Read again letter from the Collector of South Arcot 13th March 1857,† No. 51, forwarding copy of a letter from Captain Priestley in further explanation of certain points.

†*In Cons. 15th May* 1857, *No.* 983.

(Here enter No. 51.)

Read also letter from the Collector of South Arcot 28th March 1857,‡ furnishing explanation, as called for, regarding the extent of land adopted by the survey Ameens as a separate number for measurement.

‡*In Cons. 15th May* 1857, *No.* 1200.

(Here enter No. 59.)

From Government, 12th October 1854, *No.* 1318, *R. D.*

From do. A after No. 3843, *12th October* 1854.

The foregoing papers are submitted in fulfilment of the requisition of the Most Noble the Governor General of India in Council in Proceedings dated 8th September 1854. In those Proceedings the sum of Rupees 41,790 per annum was sanctioned for two years, for the further prosecution of the South Arcot survey, subject to a full report of progress at the expiration of that period. The salaries of the Establishment were not finally fixed, as it was almost impossible to state precisely, without practical experience, what rates of salaries might be best suited to individual appointments.

	Rs.
Survey Establishment	39,510.
For Clacifiers	2,280.
	41,790.

It was left to Captain Priestley to regulate the salaries in detail as experience might suggest. The plan of survey proposed was the khusreh of Bengal, within an exterior boundary laid down by scientific process. It was supposed that with the Establishment applied for 720 square miles of fields, or 800 square miles including unbroken waste, hills, &c., would be surveyed annually, and his Lordship in Council thought that if this expectation should be realized the work would be cheaply purchased. In regard to the scheme of plotting from a khusreh Ameen's return within exterior limits previously laid down by scientific survey, his Lordship noticed the difficulty of the undertaking and observed that at first sight it appeared that the advantages gained would hardly be commensurate with the labor to be expended on the process. Yielding however to successfull experiments already made by Captain Priestley, His Lordship in Council was of opinion that it was worth while that the attempt should be made, particularly when the prospects held out as to probable results were borne in mind.

2. In the report of progress under submission, Captain Priestley notices the actual results of the past year, or from November 1855 to 31st October 1856, and gives a retrospective view of the operations of the survey from the commencement. The present organization of the survey establishment and its adaptation, with certain additions, to extended proceedings, are also discussed.

En. 3 *in No.* 813 *of* 1857.

No. 1 *in Jummabundy Fusly* 1265.

3. During the year ending 31st October 1856, the total area surveyed was 450 square miles, which includes both cultivated and uncultivated lands. The operations embraced the whole talook of Arealore in Trichinopoly and the talook of Chellumbram in South Arcot, the former consisting of 179 villages, and the latter of 150 villages. Some progress, it is not mentioned how much, has also been made in Munnargoody in the last mentioned District. The number of fields measured was 2,01,332, their extent as measured being 2,24,253 acres. The number of survey Ameens engaged in these operations being 30, the average number of fields surveyed by each Ameen daily was 33·3 with an area of 37 acres. In the original estimate it was calculated

En. 8 *in No.* 813 *of* 1857, *Table A Appendix of Captain Priestley's report.*

that each Ameen would measure about 25 fields per diem with an average extent of 60 acres for the whole 25 fields. The failure to attain the estimated standard as to extent is owing partly to the working days having been about 200 instead of 260, as reckoned in the original estimate, but the chief cause, to be more fully discussed in the sequel, is traced by Captain Priestley to the circumstances of the survey Ameens having been required to measure each distinct cultivated plot, whereas according to the original plan it was proposed that two or more of these small patches of cultivation should be clubbed together to form a separate number for measurement.

Captain Priestley's report, para. 17.

"Had the fields been of the size contemplated" Captain Priestley observes "I think I may say the area surveyed during the year would have been about 700 square miles, the proportion of labor required by the two methods being (as shewn in table B) as 5 to 3."

4. Although for the reasons stated above the estimated daily work has not been attained, the actual progress made during the year greatly exceeds the results of former years. The area surveyed for the period ending 31st October 1855 was 275 square miles, while during the year before that it was only 40 square miles. The obstacles,

Extract Minutes Consultation 9th July 1857, No. 151, *Revenue Department.*

very great at first, with which Captain Priestley has had to contend, have gradually diminished, and though they were not fully removed during last year, the advance made is such as to indicate with tolerable precision the probable performances per diem of a survey Ameen in any operations that may be undertaken in future.

From Collr. 24th February in Cons. 13*th March* 1857, *para.* 7 *and following.*

5. During the two probationary years under consideration the area surveyed has been 725 square miles at a cost of Rupees 60,758, including Rupees 2,488 for boundary pillars and other contingent charges. The cost per square mile has thus been Rupees 83-12-10.

Sanction for 2 *years, Rupees* 79,020.

To Govt. 27*th Feb.* 1854, *No.* 85, *para.* 77.

The average cost of the Bengal and N. W. Provinces survey together was Rupees 47-15-2 per square mile.

Do. do. para. 74.

Looking however to the progress made during the last year, the Board have little doubt that their former estimate of Rupees 44-8 per square mile will not be exceeded ultimately, provided the extent of land which is to constitute a separate survey number be fixed on such a principle as shall render it unnecessary that every minute patch of cultivation shall be measured by the Government Ameens. Captain Priestley takes this view in para. 34 of his report. Further, in comparing the cost of the Carnatic survey with that incurred in Bengal, the quality of the respective operations should not be overlooked. This point was largely discussed by the Board in their former Proceedings and it will

To Government 27*th February* 1854, *paras.* 79 *to* 85.

be seen that Captain Priestley, looking to the results he has accomplished, notices more than once the superior accuracy of his khusreh over that of Bengal, accompained as it is by the important test afforded by plotting within limits laid down by a scientific process.

From Captain Priestley, paras. 4-5.

6. Captain Priestley notices the valuable aid afforded by Mr. Bird and the Thasildar of Arealore in the settlement of boundary disputes, but observes that the assistance would have been far more effective had an officer been exclusively detached for this duty. In South Arcot this advantage was afforded. Mr. Hall, the Collector of that District, appointed a Sheristadar on Rupees 34 per mensem and 2 Peons to

From South Arcot No. 813, *dated* 24*th in Cons.* 13*th March* 1857, *para.* 2.

attend at the survey camp. The aggregate charge on this account amounted to Rupees 210-12-8, which was debited to the survey. The Sheristadar, Captain Priestley observes, "was of the greatest assistance not only in adjusting disputed boundaries, but also in compelling the ryots to perpetuate field marks, and in superintending the erection of talook and village boundary marks on the exact spot laid down by the survey."

From Captain Priestley, para. 9.

7. With the punctual attendance of an officer as above stated, one great cause of obstruction to the progress of the survey was removed. Others, though in course of gradual removals were still felt. It will be seen on reference to Table A which accompanies Captain Priestley,

3 2 0

report, that 20 days were consumed in travelling, and that upwards of a month was lost in consequence of the non-completion of the annual settlement and of the non-attendance of the village servants.

From Collector 24*th February in Cons.* 13*th March* 1857, *paras.* 12 *to* 18. *From Captain Priestley, paras.* 22 *to* 30.

8. The important question of boundary marks is discussed both by Mr. Hall and Captain Priestley. If the erection of these marks is to be left to the villagers, the work it is seen will either be performed after much delay or not at all. Even when attended to there is no guarantee it appears that the marks have been placed on the exact spots determined by the survey. Owing to defective arrangements in this respect till lately it has been found necessary in some cases during 1856 to re-survey boundaries previously laid down with accuracy, and Captain Priestley apprehends (para. 25) that owing to the neglect of the local officers a similar re-examination of boundaries must be made in parts of the Palieneottah Jaghire. Captain Priestley has now met the evil by detailing Peons for the special duty of erecting marks. This course was adopted during last year, and the Board are led to conclude that no inconvenience is likely to be experienced in future in this matter.

From Collector 2nd March in Cons. 15*th May* 1857, *No.* 46, *with sketch plans of boundary marks, No.* 858.

From Mr. Hall, No. 813, 24*th February in Consultation* 13*th March* 1857.

9. The marks in question denote the village boundaries. They consist of masonry pillars of 3 feet and 1½ feet square of which half is below the surface of the ground. When required to denote the boundaris of the same village, the form of the pillar at the top is Pyramidical. Sometimes flat stones are used for this purpose, with lines drawn upon them marking the direction of the adjoining stations. Where the boundaries of 3 villages meet, a pillar of the dimensions above described is erected, but in this case its form at the top is flat. It appears that flat stones, as mentioned above for boundaries of the same village are never used on these occasions. The average cost of each pillar may be taken, Mr. Hall states (p. 15), at 11 As. 4. P.

From Collector 24*th Feby. in Cons.* 13*th March* 1857, *p.* 10.

10. A question has arisen as to whether the expense of placing survey marks shall be borne by the ryots or by Government. Mr. Hall would adopt the latter view, Captain Priestley on the other hand is of opinion that money thus laid out tends to swell the apparent cost of the survey; he would therefore recover the amount from the ryots, the necessary outlay being made in the first instance by Government. The Board would adopt Captain Priestley's view, and they approve of the plan latterly pursued by that officer of detailing parties for the special duty of placing marks. As regards the expenditure already incurred on this account, the amount may, should the Government see fit, be debited to the survey, but with the commencement of operations on the comprehensive plan, the charge should, the Board think, be borne by the ryots. The sum expended for boundary pillars is stated by Mr. Hall to be Rupees 2,488-7-3; but from the concluding clause of p. 29. of Captain Priestley's report, the Board are led to infer that the ryots have defrayed the cost in some instances, "the simplest mode" Captain Priestley there states "and which I have hitherto directed the persons employed to adopt is to make the two adjoining villages pay for a pillar alternately;" explicit information will be called for to clear up the doubts on this point.

From Collr. 24*th Feby. in Cons.* 13*th March* 1857, *para.* 17.

11. Since Act XX of 1855 came into operation there have been, it is stated, five charges of destroying and removing boundary marks, in three of which punishment was inflicted.

12. The report contains no information of the means adopted for marking the limits of fields. Mr. Hall will be required to supply this deficiency. His attention has been drawn to the subject in conformity with the requisition of Government in para. 7 of Extract Minutes Consultation 9th February 1857, No. 151, Revenue Department.

13. The size of fields incidentally alluded to in a former para. of these Proceedings involves a question of fundamental importance. The rule laid down for the guidance of the Superintendent in the present experimental survey was that "where several small fields come together consti-

"tuting in the mass an area not exceeding one acre in irrigated and 2 acres in unirrigated "land they may be surveyed by his Ameens in one, noticing however in the Register, the parti- "culars of each small included field as per old village account." Some confusion has however arisen on this point. In para. 14 of his report Captain Priestley stated that he had refrained this year from exercising his power of clubbing fields together, in consequence of the Collector Mr. Hall's strongly expressed wish that on revenue grounds "each holding should be measured," and in paras. 17, 18 and 19 he pointed out how much the labor of the survey had been thus increased. Mr. Hall on the other hand in his letter forward-

Paras. 19 *to* 35.

ing Captain Priestley's report dwells on the difficulty which he considers must arise from the survey officer having formed fields in an arbitrary manner instead of taking them as they stood in the village accounts.

14. Explanation of this inconsistency in the remarks of the two officers is however to be found in a letter from Captain Priestley, which Mr. Hall forwarded to the Board on the 13th March, and in the reply to a call* made by the Board for information regarding the new survey fields before that communication reached them.

* *To Collector* 13*th March* 1857. *From do.* 28*th Idem in Consultation* 15*th May, No.* 1200.

15. From these papers it appears that Captain Priestley did not mean to convey an idea in his report that he had conducted the survey and prepared his registers according to the divisions of the land into fields as shewn in the village accounts; but only that he separately measured and mapped each subdivision, or separate holding, after a field had been formed by clubbing together several contiguous pieces of land, and he observes that in the preceding year this detail was not carried out.

Captain Priestley to Collector 22*d March* 1857, *Para.* 9 *in from Collector* 28*th March in Consultation* 15*th May, No.* 1200.

16. The manner therefore in which Captain Priestley has formed his survey fields becomes a point of great importance, and the Board regret to find that it has not been always done by taking several small fields each in their individual entirely as given in the village accounts, but that instead of this course, contiguous pieces of land, although constituting only *parts* of fields entered in the village registers have been clubbed together to form a survey field. The number of the Puttah to which these fields belong and not their Nos. in the village accounts seem also to be referred to in the survey registers. This explains the arbitrary mode of forming fields to which Mr. Hall had alluded, as well as that portion of his letter forwarding Captain Priestley's report where he observes, "I do not see "that much advantage is gained by having the partitions or sub-holdings of fields separately "measured and shewn in the maps. These sub-divisions are not recognized as distinct fields in "the accounts of the Curnums but are entered as portions of the fields to which they belong."

Para. 27.

17. The assessment officer will consequently experience the difficulty pointed out by Mr. Hall since it will be troublesome to trace out the fields which stand in the village accounts, and ascertain to which of the new survey fields their assessment is to be charged either wholly or in part. Their owners also will be dissatisfied at having no aid to the maintenance of their titles, by a distinct or clear clue between the old Nos. or fields as shewn in the village accounts and in the Puttahs annually distributed and the new fields entered in the survey register. This is evident from the instance of a survey field given in Captain Priestley's explanatory letter† which only shews the Nos. of the Puttahs to which its component parts belong, such information is comparatively useless, as a Puttah frequently contains several fields, and often only parts of several fields, and its number has no reference to the village register number of any field which it contains. But while the assessment officer may therefore in some places experience difficulty, the Board must observe that no such difficulty would have existed if their instructions had been followed. They directed that entire Nos. or fields should be taken when a large survey field was to be formed by clubbing several small ones, and if this course had been pursued the inconveniencies and difficulties on which Mr. Hall has dwelt would have been avoided, as every old field would then have been clearly and immediately traceable in the survey register.

† *22d March* 1857, *No.* 7.

18. In searching for explanation of the cause of this deviation from their instructions, the Board find it in Captain Priestley's letter* to the Collector dated the 9th March. He there points out that he considered he was only following the directions which Mr. Hall has sent him, and gives extracts from some of the letters which he had received. On reading these extracts the Board find that they are susceptible of misapprehension, as Mr. Hall appears to use in some places the words "holdings" and "fields" indiscriminately, and there are certainly passages which recommend the course followed by Captain Priestley. For instance, Mr. Hall observes, "I think it highly important that we should have the accurate measurement of each "holding as well as of each field" and again "it would be best as a general rule that each holding "should be measured and certainly shewn on the map either by a letter or by a dotted line;" and then he observes, "In many instances several persons hold fields by joint Puttahs, in these "cases it is not necessary to attempt to shew each man's holding; but where a separate Puttah is "given then it is highly desirable that the holding should be also separately shown with its "dimensions." These passages support the proceedings of Captain Priestley by conveying an impression that the same importance which attaches to entire fields is to be attached to portions of them, or in other words to "holdings" when in the occupancy of different persons, and they are therefore primâ facie inconsistent with Mr. Hall's observation in his review of the survey report where he remarks, "I do not "see that much advantage is gained by having the partitions "or sub-holdings of fields separately measured and shewn in the maps. These sub-divisions are "not recognised as distinct fields in the accounts of the Curnums, but are entered as portions of "the fields to which they belong."

* *Enclosed in Collector's letter of* 13*th March para.* 12 *and Extract Minutes Consultation* 15*th May* 1857.

Para. 27.

19. To reconcile this apparent inconsistency, the Board had supposed Mr. Hall's 1st object to be the careful retention of all fields entered in the village accounts; and 2ndly, a measurement of their subdivisions with a record of them in the survey registers and maps only when they are held by different parties *and*† *included in different Puttahs.* In his explanatory letter Mr. Hall however makes an alteration on the 2nd point, and says that he contemplated the measurement of portions of fields, or holdings only "when they happen to be undefined portions of enclosed fields." At the same time Mr. Hall freely acknowledges that from his notes Captain Priestley could hardly have concluded otherwise than that he "deemed it desirable, in a revenue point of view, that every holding should be measured separately." This detail has been entered into by the Board in justice to Captain Priestley, who received from the Collector instructions wanting in clearness, and who had difficulty in obtaining from the Curnums accurate information of the fields as they stood in the village accounts.

†*See the last passage quoted in preceding para. of* 13*th March para.* 6 *in Cons.* 15*th May* 1857, *No.* 983.

Para. 4.

20. On considering the general question as to what course it is best to pursue in future, the Board see no occasion to alter the instructions which they gave at the commencement of the survey, and which met with the concurrence of Government. It is highly important, as a measure of administrative policy and with a view to the saving of labor and expense at the survey, that a minimum size should be fixed for fields, and if several of the present small fields are taken *in their integrity* to form a new large one, the Board do not see that difficulty or embarrassment can arise, since the old distinguishing Nos. which are found in the village accounts, Puttahs, deeds of sale, &c., will then be traceable in the details of the survey registers. Thus far Mr. Hall has consequently only been advocating the course always intended by Government and the Board, but he appears to have overlooked the imperfect means which Captain Priestley had for carrying it out. The surveying officer must receive from the revenue authorities those accurate preliminary details of existing fields which Captain Priestley justly claims in his letter of the 9th March, but from the want of European officers in the District, as Government are already aware, it has not been practicable to employ one of the Collector's subordinates on the special duty of aiding the survey, and this want has not been sufficiently supplied by assistance from the superior Native reve-

In from Collector 13*th March in Cons.* 15*th May, No.* 983.

nue servants. Captain Priestley has thus had mainly to depend on the information obtained by him from the curnums and villagers, and though Mr. Hall gave in the present year the services of a Sheristadar whose general assistance is most highly spoken of by Captain Priestley, Mr. Hall's remarks in the final paragraphs of his letter of 13th March, show that he does not appreciate the difficulty under which a surveying officer, a stranger in the District, must labor, unless the revenue authorities collect clear information of existing fields form him, "preparatory to their being measured."

In Cons. 15th May 1857, No. 983.

21. The present survey having been undertaken as "an experiment" it was to be expected that some imperfections should prevail at its commencement, and the Board's object in their present remarks is to profit by past experience in expediting and rectifying its future progress. They would therefore strongly express their conviction that it will not be advisable hereafter for the opening operations to be kept so much to the surveying officer. Instead of this the servants of the Collector, or assessing officer, should not only fix the village boundaries but point out the fields according to the village registers, and aid in clubbing them into large survey fields. The surveying officer would then work,* with confidence and despatch, and the task of fixing the assessment would be afterwards performed without any difficulty in distinguishing the fields. The Board have already observed that as a general rule entire fields should be clubbed together, to form the new survey fields, but this need not be invariably done. In some instances the position of the subdivisions into which fields have fallen and the particular manner of their occupancy may render it advantageous to depart from the rule, with a view, for example, to unite the holdings of an individual in one new field, and no confusion will result from this arrangement when it is made by the surveying and assessing Departments acting together, and after accurate details have been collected of the old fields for insertion in the survey Registers. In short, the two essential points to aim at, in the Board's opinion, are 1st, that the surveying officer should not be delayed by want of information regarding the existing fields, and 2d, that when the measurement have been made and the survey register of a village has been so drawn out, the assessing officer should be able to proceed to his duty with ease and confidence from having an accurate knowledge of the materials or componant parts which have been brought together to form each new survey field. Hereafter when the general survey has been organized, the Board hope that the work of the assessment officer will commence directly the survey operations are finished.

* *See Capt. Priestley's letter of 22d March, para.* 12.

In from Collector 28th March in Cons. 15th May 1857, *No.* 1200.

22. After large survey fields have been formed in the above manner, the degree in which their sub-divisions are to be measured and shewn in the maps by dotted lines must be left much to the discretion of the survey officer acting in communication with the local revenue authorities; much will depend on the natural peculiarities of the field and on the manner in which its subdivisions are occupied. The general rule must be to avoid much detailed measuring, especially when it is apparently safe to leave "the component holdings to be adjusted by the curnums," (Collector's letter of 13th March para. 7), or other District servants.

In Cons. 15th May, No. 983.

23. If these views are approved of, they can be acted upon without difficulty in the continuance of the survey, and meanwhile the Board will instruct Mr. Hall to take all the advantage he can of Captain Priestley's Ameens being still in the District to go over the survey field registers with their aid, more especially in the Chullumburum, Manargoody, and Cuddalore talooks, for the purpose of removing difficulties in the process of distributing the new assessment. They will also call on the Collector of Trichinopoly to report, after conference with Captain Priestley what course has been there pursued with respect to fields though no anticipations of difficulty have reached them on the subject from that Collectorate.

24. It only remains to observe that in the papers now under consideration allusion has been made to the old fields as they stood at the time of the early Pymash, or rough District survey. Between 40 and 50 years have since elapsed, and during that period many large sized fields have been broken up through decrees of Court, family partitions, partial sales, &c. The idea has therefore been started whether the object of having large fields could not be attained by tracing out these divisions and restoring the ancient fields. The Board do not however consider it necessary to dwell on this subject, as the labor and expense would exceed the worth of the result, even if there was any certainty of the wished for result being obtainable.

25. In the appendix Captain Priestley sets forth fully his reasons for considering the khusrah system of survey combined with village boundaries taken by traverse, as best suited to a country where land is minutely subdivided, and in para. 33 of his report he points out that the difficulty anticipated in carrying out this system has been quite overcome: "I think I may venture to say" Captain Priestley observes "that the difficulty has been overcome, and that too when the subdivision of fields have been infinitisemal. The discrepancy found between the sum of the fields measured by an Ameen, and that obtained by the scientific mode of computation, is generally so trifling as not to be worthy of notice." Table B already referred to more than once in these Proceedings shew the difference in 100 villages chiefly unirrigated, taken at random, to be only 0·72 per cent. while that in 40 villages for the most part irrigated, is 1·37 per cent. This result is most satisfactory, as establishing the practicability of the plan pursued and as shewing that the operations, so minute in themselves, have been carried on under able and watchful supervision.

Enc. No. 9 in 813 of 1857.

26. The question of the establishment including an increase to the salaries of Lieut. Hessey and Prat, requires only a passing remark as it will be more properly disposed of when the scheme for a general survey comes under consideration. The present strength of the Establishment is 3 Uncovenanted officers and 30 survey Ameens with the other officers necessary to complete the establishment. European superintendence is the most expensive item, but with three European officers as at present, Captain Priestley is of opinion that the Native agency may be considerably enlarged. He would try 40 survey Ameens in the first instance, and if it is found that the Superintendent and his 2 Assistants can keep pace with a larger number of Ameens he would in that case appoint 50 of that class.

Report, para. 19.

27. Both Mr. Hall and Captain Priestley recommend that a lithographic press may be attached to the survey office. The saving in time Captain Priestley says would be very great, as it would obviate the necessity of making a copy of each village map, a process which, with the necessary verification with the original, entails as much labor as the preparation of the map in the first instance. At present the maps are sent to Madras to be lithographed. The maps of 10 villages only have been struck off, Mr. Hall does not mention the charge. Five copies at least of each village map will be required. In a former communication dated 14th October 1856, No. 209,* Mr. Hall stated that although the value of these maps had been pointed out to the land holders, a desire to possess them had not been excited. The ryots expressed themselves satisfied to go on without them. Until the survey itself is appreciated by the people and a plan is adopted of exhibiting properties in a separate form and on a larger scale than at present, it seems unlikely that any great demand for maps will spring up. To be acceptable to the ryots individually, each should be able to recognize his own fields in the plains with their exact forms and boundaries. As the survey proceeds means will doubtless be discovered of furnishing what is required.

From Mr. Hall 24th February in Cons. 13th March 1857, *para.* 36.

Captain Priestley's report, para. 21.

1 *Copy for the village authorities.*
1 *do. for the Collector.*
1 *do. for the Tahsildar.*
1 *do. for the Sub-Collector.*
1 *do. for the Superintendent of survey.*

* *In Cons. 3d January* 1857.

Resolved that copy of these Proceedings be forwarded to the Collector of South Arcot, who will be pleased to furnish with the least avoidable delay the information called for in paras. 10 and 12.

Resolved further that copy be furnished for the information and orders of the Right Honorable the Governor in Council.

(A true Extract.)

(Signed) J. D. SIM, *Acting Secretary.*

No. 16. ORDER THEREON, No. 676; dated 4th July 1857.

1. In these Proceedings, the Board of Revenue review Captain Priestley's Report of his operations in the South Arcot and Trichinopoly Districts from 1st November 1855 to 31st October 1856.

2. In para. 3 of their Proceedings, the Board sum up the results in the following terms.

Captain Priestley's Report (enclo. 3 in No. 813 of 1857) para. 13, &c.

"The total area surveyed was 450 square miles in- "cluding both cultivated and uncultivated lands. The "operations embraced the talook of Arialoor in Trichino- "poly, and that of Chitambaram in South Arcot, the "former consisting of 179, and the latter of 150 villages. Some progress has also been made "in the Manargoody talook of the last mentioned dis- "trict. The number of fields measured was 2,01,332; "their extent 2,24,253 acres. The number of survey "Ameens employed was 30; and their average daily work "33·3 fields, with an area of 37 acres."

Enclo. 8 in No. 813 of 1857, Table A. in appendix of report.

3. From a subsequent communication from the Board of Revenue, the Government have learnt that it will take but two months longer to finish the Manargoody talook. The whole of the South Arcot District will thus have been surveyed in 33 months from the sanction of the Government of India being communicated to Captain Priestley, and considering that when he arrived at Cuddalore in April 1853, so far from finding a ready organized Department, he could not obtain one man possessed of even the most elementary knowledge of surveying, the Governor in Council looks upon the result attained as in the highest degree creditable to the Superintendent's energy and ability.

Offl. Memo from Acting Secretary Board of Revenue, dated 20th May 1857, No. 1695.

Sanction September 1854.
Completion July 1857.
Calculate from October 1854.

4. It is matter of regret, that an ambiguity of expression by the Collector of South Arcot, (which will be fully noticed below,) relative to the formation of "new" or "survey" Fields, should have in any way tended to diminish the benefits which must be derived by the people and the Government, from an accurate survey of the land.

Board, para. 5.

5. On the whole area surveyed,* the cost has been Rupees 83-12-10 per acre. This is large in comparison with the estimate, Rupees 44-8; and with the cost of the Bengal survey;† but due consideration must be had to the fact, that much more minute holdings have been measured by Captain Priestley than were surveyed in Bengal or the N. W. Provinces; and that greater accuracy is said to have been attained, by the combination of the khusrah method with the previously traversed boundary,‡ but as the same method was, the Government believe, pursued in Bengal and the North West Provinces, the force of the latter argument is not apparent.

* 765 *Miles, viz.*

		Miles.
To October 31st	1854	40
" " "	1855	275
" " "	1856	450
		765

† *Bengal and N. W. P. survey (taken together) cost Rs.* 47-15-2 *per Square Mile according to Board of Revenue; but according to Captain Thuillier (Manual of surveying page* 512 *tabular statement Rupees* 24-8-10½*).*

	Rs.	*A.*	*P.*
North West Provinces....	26	12	1
Bengal....	22	5	8
	2)49	1	9
	24	8	10½

‡ *Board para. 5.*

6. It was calculated at first that each Ameen would measure, on an average, 60 acres per diem. The chief cause of this standard not having been attained, is said to have been that they were required to measure each distinct cultivated plot, whereas, according to the original plan, it was proposed that two or more of these small patches of cultivation should be clubbed together to form a separate number for measurement. The work performed in the year under review was in excess of that done in the year previous and greatly in excess of that done in 1854, so far the result is satisfactory, but it must be remembered that the full strength of the Establishment has not been put forth for a whole year continuously, until during the one under review, and that therefore no fair comparison can be drawn, between 1856 and the two previous years. But considering, in the abstract, the amount of work done, and its cost, the Government concur with the Board in their expectation that the Estimate of 44·8 will probably not be much exceeded ultimately, when operations, on an enlarged scale are systematically undertaken, and also in thinking that reliable data have been obtained for estimating the probable performances of a survey Ameen hereafter.

Board, para. 3.

Board, para. 4.

7. It is satisfactory to observe that the Revenue authorities in Trichinopoly did their best to lighten the Superintendent's labours, but Government regret that, in spite of their efforts, much opposition has been encountered. This opposition was in some cases more than passive. The field and other marks were neglected, and even removed, causing much delay to the operations, and in some places rendering a re-survey necessary; inconvenience was also felt from the village officers not being in attendance when required. The experience now gained will be most useful in carrying out the general survey throughout the Presidency; in that the obstacles likely to present themselves will be foreseen, so that measures may be taken for their removal. It appears to the Governor in Council that the village officers should be made personally responsible for the state and safe custody of all marks left by the surveyors; and the summary punishment in a few instances of those who refuse or delay to attend, will probably go far to put a stop to delay from this cause. Government fully admit the importance of a Revenue officer, possessing immediate authority over the villagers, being attached to the survey camp. In most Districts, at the present time, the paucity of European agency will prevent one of the Covenanted Assistants being available, but it will generally be practicable to detach an experienced Native Revenue officer, as was done by Mr. Hall; the benefits resulting from which measure are thus described by Captain Priestley; "Lieut. Hessey met with no hindrance worthy "of mention. The Serishtadar was of the greatest assistance, not only "in adjusting disputed boundaries, but also in compelling the ryots to perpetuate field marks, "and in superintending the erection of talook and village boundary marks, on the exact spot "laid down by the survey."

Captain Priestley's Report, paras. 4-5. Board, P. C.

Report, p. 9.

8. In para. 2 of Mr. Hall's letter to the Board of Revenue, No. 813 of 24th February 1857, it is said that the aggregate charge on account of this officer, and two Peons who were detached to the survey camp, was Rupees 210-12-8, and that this was debited to the survey, other servants being entertained by the Collector at a corresponding expense to supply their places. There will be no difficulty in adopting a similar course in future, but these, and all similar arrangements connected with the conduct of the general survey, will be determined by Government in communication with the officer to be appointed to conduct the duty.

Collr's. letter, p. 2. Rev. Board, p. 6. Supt. p. 4-5.

9. From an enclosure in the Superintendent's Report, it appears that no less than 2,577 days were lost by the thirty Ameens on various accounts; of the total, 572 days were lost in travelling, as appears by column 2 of the Statement, but, probably from a clerical error, the number of days is stated by the Board to have been only twenty. This latter item of loss was chiefly owing to a divided sphere of operation; when the Arialoor talook was completed, the Ameens had to proceed to Chitambaram; but

Statement A. Board, para. 7.

Para 7.

besides this, they were in several cases obliged to return to correct or test their former work, and thus much time was lost. The allotment of compact fields of duty will in future remedy a great part of this evil, and it is to be hoped that the time (1054½ days) lost by the non-attendance of village servants, will, if energetic and proper measures be adopted, ultimately disappear.

10. The boundary marks that have been adopted are two-fold; to mark places where two villages join, square pillars of masonry with pyramidal tops have been erected; and where the boundaries of three or more villages meet, similar pillars with flat tops have been constructed. The average cost of each Pillar was Annas 11 Pice 4. The question as to who shall bear the cost of their erection has formed matter for discussion between Mr. Hall and the Superintendent, the former considers that they should be paid for by Government; while Captain Priestley would saddle the ryots with their cost; inasmuch as money thus laid out tends to swell the apparent cost of the survey, if charged to that Department.

11. Government observe that in the North West Provinces, the fixing of the boundaries is carried on by a distinct establishment, specially appointed for the purpose, who precede the survey in such a way, that the surveyor may always find adjusted boundaries. These boundaries are marked by mud pillars at each principal angle or bend of the boundary; small ones where two villages meet, and at a trijunction, pillars about 5 feet high. It does not appear that the villages are made to pay for these pillars, the cost of which must be very trifling, they being merely of mud. In favor of the boundary marks being erected at the cost of the village, it may be argued that they would on that account be better protected from injury, but the Government will issue no general or definite orders upon the subject, until they are in a position to organize an uniform system for the whole of the Presidency in communication with the heads of the survey and assessment Departments. Meanwhile, it appears that Captain Priestley has directed the persons employed in superintending the fixing of the boundaries to make adjoining villages pay for a pillar alternately. Government will not disturb any arrangements that may be approved of by the Board, who state that they have called for further information on the subject.

From Collr. p. 12-18.
From Supt. p. 22-30.
Rev. Board, p. 8 &c.

12. In para. 12, the Board state that they have called for information as to the means adopted for marking the boundaries of fields. In countries where stones are to be had, ready means are at hand for forming permanent field boundaries; in Deltas, where stones are not obtainable, mounds of earth or trees appear to be the best substitutes.

13. The Government now proceed to notice the misunderstanding, alluded to in a former para., as having arisen between the Collector and Superintendent relative to the size of the fields, owing to ambiguous expressions in Mr. Hall's letter to Captain Priestley.

14. In the 14th and following paras. of his Report, Captain Priestley thus expresses himself: * * * * "I have not taken advantage of the permission granted me to measure fields smaller than 2 acres in dry, and 1 acre in wet land clubbed together, until that minimum was reached." * * * * I was induced to deviate from my instructions on this point in consequence of the strongly expressed opinion of the Collector of South Arcot, who considered it highly desirable, in a revenue point of view, that each holding should be measured.

Supt. paras. 14-15.
Col. ,, 19-35.
Bd. ,, 13-25.

"15. I should wish to have more decided instructions on this head." Mr. Hall, in his letter of 24th February enlarges upon the difficulties which he considers must arise from the survey officer having formed fields in an arbitrary manner, instead of taking them as they stood in the village accounts. The Board explain this discrepancy. It appears that Mr. Hall's instructions to the Superintendent were susceptible of misapprehension, particularly on account of the indiscriminate use of the words "holding" and "field."

15. The rule laid down in the first instance for the guidance of the Superintendent was, that "where several small fields come together, constituting an area not exceeding one acre in irrigated, and 2 acres in unirrigated land, they might be surveyed by the Ameens in one, noticing however in the Register the particulars of each small included field, as per old village accounts."

Para. 13.

63 A

Fort Saint George, Revenue Consultation of 7th July 1857.

16. The course pursued by Captain Priestley has been to measure and map each sub-division or separate holding, after a field had been formed by clubbing together several contiguous pieces of land; and these contiguous pieces of land have been only parts of fields as entered in the village Registers, but such parts as comprised one man's "holding;" and the number of the Puttah to which the fields belong, and not the number of the fields themselves in the old village accounts, has been entered in the new survey registers. This arbitrary formation of fields is the course to which Mr. Hall has taken exception, and is one which he never meant to recommend, but, as intending which, he freely acknowledges that his words might be misapprehended.

17. The Board (para. 17) thus describe the consequence of this proceeding, and the Government most fully concur in their remarks. "The assessment officer will consequently experience the difficulty pointed out by Mr. Hall, since it will be troublesome to trace out the fields which stand in the village accounts, and ascertain to which of the new survey fields their assessment is to be charged, either wholly or in part. The owners of the land will be dissatisfied at having no aid to the maintenance of their titles, by a distinct and clear clue between the old Numbers or fields, as shewn in the village accounts, and the puttahs annually distributed, and the new fields entered in the survey register. Such information is comparatively useless, as a puttah frequently contains several fields, and often only parts of several fields, and its number has no reference to the village register number of any field which it contains." The anomally in short to which Mr. Hall's want of clearness has given rise is, that the fields, as entered in the village register, have not been taken in their integrity in forming the survey fields; but portions of them, of which no definition or record exists, have been made use of as its component parts. It is not to be gathered from the papers before Government in how many villages this faulty survey has taken place; but it must be stopped at once, and the Board's original instructions adhered to. Government are glad to find that in Trichinopoly every field has been measured.

18. The Government remark that the error now more clearly detailed was prominently referred to by the Board in their Proceedings of the 6th May 1857, No. 1433, which were replied to by Government under date the 5th Ultimo, No. 554. It was then ordered that advantage should be taken of the presence in the District of Mr. Grant, the additional Sub-Collector, and that his services should be made available in tracing in the new survey registers, the fields as entered in the village registers, and in making such preparation for the assessing officer, as will enable him at once to proceed with his duties, without hindrance from the results of the ambiguity of expression made use of by the Collector in his communication with the Superintendent of the survey.

19. As stated by the Board in the latter part of para. 21, it need not be held as an invariable rule in the future progress of the survey, that entire fields shall be clubbed together, though such a course should be generally followed; "the position of the sub-divisions into which fields have fallen, and the particular manner of their occupancy," will sometimes render it advantageous to depart from the rule.

20. The Governor in Council approves of the degree in which the sub-divisions of the survey fields are to be measured, and shewn in the maps by dotted lines, being left to the survey officer acting in communication with the local revenue authorities.

21. At the close of para. 13 of his letter of 13th March 1857 to the Revenue Board, Mr. Hall remarks "I do not think there would be found any necessity for the Revenue authorities, as Captain Priestley suggests, to take steps to have the old survey fields marked out preparatory to their being measured."

22. The Board of Revenue have justly, in the opinion of Government, recorded their views in this respect, to the effect that the Collector wholly fails to appreciate the difficulties under which a surveying officer, a stranger to the District, must labour, and so convinced are Government of the necessity of a surveyor finding every thing ready for him, that the attention of the officer who may hereafter be appointed to superintend the survey of the Presidency, will be called to the convenience that would result, could the rough sketch which the party preceding the surveyor will give to him, showing the boundaries and general contour of the village, contain also

a general sketch, (or Shajrah as it is called in the North West) exhibiting the position of the fields as entered in the Curnum's accounts. This would facilitate, to a very considerable extent, the labours of the surveying party, and greatly economize time.

Supt. Enc. No. 9 in 813 of 1857, Rev. Bd. p. 25.

23. The satisfactory result of the operations, as far as correctness goes, the amount ascertained by traverse varying only 0·72 per cent. from that measured by the Ameens, will be brought prominently to the notice of the Government of India. The Governor in Council presumes that due care was taken by Captain Priestley to conceal the results of his scientific computation from the Ameens, in order to prevent their making up their totals to correspond.

Board, para. 26.

24. No orders can now be passed on the subject of the salaries of Lieutenants Hessey and Pratt.

25. The Superintendent shews that his being allowed to have a Lithographic Press attached to his survey office would be a great saving of time and expense. It appears that it now takes up as much time, and is almost as troublesome, to make an accurate copy of a Map of a village, as to plot the original. The Government agree that it would be most advisable that the Maps should be lithographed under the immediate superintendence of the officer conducting the survey, instead of as at present being sent to Madras. A copy of this paragraph will be forwarded to the Chief Engineer, who will be good enough to state if any press be available in this country.

Margin of last para. of Board's Proceedings.

26. It may be observed that the Collector and Sub-Collector are both mentioned by the Board as requiring copies of the village Maps. There appears to be no necessity for supplying a Sub-Collector with Maps of villages in the Collector's Division, still, the Government are of opinion that five copies, at the least, of the Map of each village should be struck off. That under present circumstances, the ryots should not have exhibited much desire to possess Maps, can hardly be deemed surprising.

" *I strongly recommend that all chains be procured from England. Of those furnished from the Gun Carriage Manufactory, not one of the 60 was found to agree with the standard, even on their first arrival, and ever since by breaking and stretching they have been a constant source of delay and error.*"

27. The Government resolve to send a copy of part of para. 20 of Captain Priestley" Report, with reference to the Chains made at the Gun Carriage Manufactory, to Major Maitland for his information.

(Signed) H. FORBES,
Acting Secretary to Government.

6 B

Revenue Department

No. 1863

Extract from the Proceedings of the Board of Revenue
dated 15th May 1857.

Read again letter from the

Sn Cons 19th March 1857 813 — Collector of South Arcot 25th February 1857 No. 68 forwarding with remarks Captain Priestley's report on the survey operations in South Arcot.

Read do from do 15th March 1857

Sn Cons 15th May 1857 983 — No. 51 forwarding copy of a letter from Captain Priestley in further explanation of certain points.

(Non Extract No. 51)

Read also do from do 28th March

Sn Cons 15th May 1857 1200 — 1857 furnishing explanation, as called for, regarding the extent of land adopted by the Survey Ameens as a separate number for measurement.

(Non Extract No. 59)

The foregoing papers are submitted

Sn Cons 19th Oct 1854 No. 1315 R.D — in fulfilment of the requisition of the Most Noble the Governor General of India in Council

Non do Dept No. 3543. 19th Oct 1854 — in Proceedings dated 8th September 1854. In those

Survey Establishment 1st ordered — 39510
Do Buildings — 2280
41790

Proceedings the Sum of Rupees 41790 per annum was sanctioned for two years for the

further prosecution of the South Coast Survey, subject to a full report of progress at the expiration of that period. The Salaries of the Establishment were not finally fixed, as it was almost impossible to state precisely, without practical experience, what rates of salaries might be best suited to individual appointments. It was left to Captain Priestley to regulate the salaries in detail as experience might suggest. The plan of Survey proposed was the Khusrah of Bengal, within an exterior boundary laid down by scientific processes. It was supposed that with the Establishment applied for 720 square miles of plains, or 800 square miles including unbroken coasts, Hills, &c. would be surveyed annually, and Her Lordship in Council thought that if this expectation should be realized the work would be cheaply purchased. In regard to the scheme of plotting from a Khusrah Ameen's return within exterior limits previously laid down by scientific Surveys, Her Lordships noticed the difficulty of

of the undertaking and observed that at first sight it appeared that the advantages gained would hardly be commensurate with the labor to be expended on the process - yielding however to successful experiments already made by Captain Priestley, Her Lordship in Council was of opinion that it was worth while that the attempt should be made, particularly when the prospects held out as to probable results were borne in mind.-

2 On the report of progress under submission Captain Priestley reviews the various results of the past year or from November 1833 to 31st October 1836, and gives a retrospective view of the operations of the Survey from the commencement. The present organization of the Survey Establishment and its adaptation, with certain additions, to extended proceedings, are also discussed.-

3 During the year ending 31st October 1836 the total area surveyed was 650 square miles, which includes both cultivated and uncultivated lands. The operations embraced the

Encl. 3 in No. 813 of 1837

the whole Talook of Arcalore in Trichinopoly
and the Talook of Chellumbram in South
Arcot, the former containing of 179 villages
and the latter of 130 villages. Some progress,
it is not mentioned, have much, has also
been made in Munnargoody in the last
mentioned District. The number of Jobs
measured was 201,332 their contents as mea-
sured being 2,24,253 acres. The number of
Survey Ameens engaged in these operations
being 30, the average number of Jobs
surveyed by each Ameen daily was 33.3 with
an area of 37 acres. In the original Estimate
it was calculated that each Ameen would
measure about 25 Jobs per diem with an
average extent of 60 acres for the whole
25 Jobs. The failure to attain the estimated
standard as to extent is owing partly
to the restricted days having been about
200 instead of 260, as reckoned in the original
Estimate, but the chief cause, to be more
fully discussed in the sequel, is traced by
Captn Priestley to the circumstance of the
Survey Ameens having been required to

measure

W. I. in Summary
Feby 1865.

Captn Priestley's report
p. 17

Ex. E in W. 813 of 1857.
Table A Appdx
of Captn Priestley's rep.

measure each distinct cultivated plot, where-
as according to the original plan it was
proposed that two or more of these small
patches of cultivation should be thrown to-
gether to form a separate number for
measurement. "Had the Jobs been of the
size contemplated" Captain Priestley observes
"I think I may say the area surveyed during
the year would have been about 700 square miles
the proportion of labor required by the two
methods being (as shown in Table B) as 5 to 3."

4 Although for the reasons stated above
the estimated daily work has not been
attained, the actual progress made during
the year greatly exceeds the results of former
years. The area surveyed for the period
ending 31st October 1855 was 275 square miles,
while during the year before that it was
only 40 square miles. The obstacles, very great
at first, with which Captain Priestley has
had to contend, have gradually diminished,
and though they were not fully removed during
last year, the advance made is such as to
indicate with tolerable precision the probable

performance

Est. Mem. Cir. of 27th
1854. W. 151 to D.

performances per diem of a Survey Amean on any operations that may be undertaken in future.

From Coll^r 24th July 1834 13th March 1837 p. 7 and following

During the two probationary years under consideration the area Surveyed has been 725 Square miles at a cost of Rupees 60758 including Rupees 2488 for Boundary pillars and other contingent charges. The cost per Square mile has thus been Rupees 83-12-10. The average cost of the Bengal and N.W. Provinces Survey together was Rupees 47-15-2 per Square mile. Nothing however to the progress made during the last year the Board have little doubt that their former estimate of Rupees 46-8 per Square mile will not be exceeded ultimately, provided the extent of land which is to constitute a separate Survey number be fixed on such a principle as shall render it unnecessary that every minute patch of cultivation shall be measured by the Government Amean. Captain Priestley takes this Amean in p. 34 of his report. Further in comparing the cost of the Carnatic Survey with that incurred in Bengal, the quality of the perspective

Sanction for 2 years Rupees 79020

To Govt 27th July 1834 No 88 p. 77

operations

operations should not be overlooked. This point was largely discussed by the Board in their former Proceedings and it will be seen that Captain Priestley, looking to the results he has accomplished, notices more than once the superior accuracy of his Survey over that of Bengal, accompanied as it is by the important test afforded by plotting within limits laid down by a scientific process.

To Govt 27th July 1834 p. 79 & 85.

From Capt Priestley p. 4-5

Captain Priestley notices the valuable aid afforded by Mr Bird and the Thasildar of Arcot in the settlement of Boundary disputes but observes that the assistance would have been far more effective had an officer been exclusively detached for this duty. In South Arcot this advantage was afforded. Mr Holt, the Collector of that District appointed a Sheristadar on Rupees 30 per Mensem and 2 Peons to attend at the Survey Camp. The aggregate charge on this account amounted to Rupees 210-12-8 which was debited to the Survey. The Sheristadar Captain Priestley observes "was of the greatest assistance not only in adjusting disputed Boundaries,

From S. Arcot No 813 Dated 24th Decr 13th March 1837 p. 2.

From Capt. Priestley p. 9.

but

but also in compelling the Ryots to perpetuate field marks, and in superintending the erection of Taluk and Village boundary marks on the exact spot laid down by the Survey.

7. With the punctual attendance of an Officer as above stated, one great cause of obstruction to the progress of the Survey was removed. Others, though in course of gradual removal, were still felt. It will be seen on reference to Table A which accompanies Captain Priestley's report, that 20 days were consumed in travelling, and that a month was lost in consequence of the non-completion of the annual Settlement and of the non-attendance of the Village Servants.

8. The important question of Boundary marks is discussed both by Mr Hall and Capt Priestley. If the erection of these marks is to be left to the villagers, the work it is seen will either be performed after much delay or not at all. Even when attended to there is no guarantee it appears that the marks have been placed on the exact spots

From Collector 26th Feby 1857 in Cons 10th March 1857 P 12 @ 18
From Capt Priestley P 22 @ 30

10 53

spots determined by the Survey. Owing to defective arrangements in this respect till lately it has been found necessary in some cases during 1856 to re-survey boundaries previously laid down with accuracy, and Captain Priestley apprehends (para 25) that owing to the neglect of the local officers a similar re-examination of boundaries must be made in parts of the Palicrmattah Zoghire. Captain Priestley has now met the evil by detailing Peons for the special duty of erecting marks. This course was adopted during last year and the Board are led to conclude that no inconvenience is likely to be experienced in future in this matter.

9. The marks in question denote the village boundaries. They consist of masonry Pillars of 3 feet and 1½ feet square of which half is below the surface of the ground. When required to denote the boundaries of the same village the form of the Pillar at the top is Pyramidical. Sometimes flat stones are used for this purpose, with lines drawn upon

From Collr of Chingleput Ltr No 10 Dated 1857 P 56 with Detail plans of boundary marks P 585.

upon them marking the direction of the adjoining stations. Where the boundaries of 3 villages meet, a Pillar of the dimensions above described is erected, but in this case its form at the top is flat. It appears that flat stones, as mentioned above for boundaries of the same village are never used on these occasions. — The average cost of each Pillar may be taken, Mr Hall states (p. 15 / at 11. 4. 21 p.

From Mr Hall 11. 5th 26th Feb. & 6th 13th March 1827

10. A question has arisen as to whether the expense of placing Survey marks shall be borne by the Ryots or by Government. Mr Hall would adopt the latter view. Captain Priestley on the other hand is of opinion that money thus laid out tends to swell the apparent cost of the Survey; he would therefore recover the amount from the Ryots, the necessary outlay having made in the first instance by Government. The Board would adopt Captain Priestley's view and they approve of the plan latterly pursued by that Officer of detaining peons for the expend

duty

From C.R. 21st Feby in Con 13th March 1827 p. 10.

11 & 8

duty of placing marks: as regards the expenditure already incurred on this account, the amount may, should the Government see fit, be debited to the Survey, but with the commencement of operations on the comprehensive plan, the charge should, the Board think, be borne by the Ryots. The sum expended for boundary pillars is stated by Mr Hall to be Rupees 2,488-7-3: but from the concluding clause of p. 29. of Captain Priestley's report, the Board are led to infer that the Ryots have defrayed the cost in some instances "The inexplicit mode" Captain Priestley there states "and which I have hitherto directed the persons employed to adopt is to make the two adjoining villages pay for a pillar alternately" - explicit information will be called for to clear up the doubts on this point.

de de p 17

11. Since Act XX of 1835 came into operation there have been, it is stated five charges destroying and removing boundary marks, in three of which punishment was inflicted.

12. The report contains no information of the means adopted for marking the limits of fields. Mr Hall will be required to supply this

Proceedings

this deficiency. His attention has been drawn to the subject in conformity with the requisition of Government in p: 7 of Extract Minutes Consultation 9th February 1857 No 151 Revenue Department.

13. The size of fields incidentally alluded to in a former para of these Proceedings involves a question of fundamental importance. The rule laid down for the guidance of the Superintendent in the present experimental Survey was that "where several small fields "come together constituting in the mass an area "not exceeding ten acres in irrigated and 2 acres "in unirrigated land they may be surveyed "by his Ameens in one nothing however in "the Register, the particulars of each included fields as per old village accounts". Some confusion has however arisen on this point. In Para 4th of his report Captain Priestley stated that he had refrained this year from exercising his power of clubbing fields together, in consequence of the Collector Mr Hall's strongly expressed wish that on resurvey grounds "each holding should be measured

12 88

"measured" and in Para 17. 18 and 19 he points out how much the labor of the survey had been thus increased. Mr Hall on the other hand in his letter forwarding Captain Priestley's Report dwells on the difficulty which he considers must arise from the survey officer having formed fields in an arbitrary manner instead of taking them as they stood in the Village accounts.

Para 17 & 35

14. Explanation of this inconsistency in the remarks of the two officers is however to be found in a letter from Capt. Priestley which Mr Hall forwarded to the Board on the 13th March and in the reply to a call made by the Board for information regarding the new Survey fields before that communication reached them.

Coll. 13th March 1857 para 2 & 3 Nelson in Co 15th May 1200

15. From these papers it appears that Captain Priestley did not mean to convey an idea in his report that he had conducted the Survey and prepared his registers according to the divisions of the land into fields as shewn in the Village accounts. but only that he separately measured and mapped out

Capt Priestley to Coll. 22d March 1857 Para 9 in From Collector 28th March in Co 15th May No 1200

each subdivision or separate holding after a field has been formed by clubbing together several contiguous pieces of land and he observes that in the preceding year this detail was not carried out.

16. The manner therefore in which Captain Priestley has formed his Survey fields becomes a point of great importance, and the Board regret to find that it has not been always done by taking several small fields each in their individual entirety as given in the Village accounts, but that contiguous pieces of land, although constituting only parts of fields entered in the village Registers have been clubbed together to form a Survey field. The number of the Puttah to which these fields belong and not their Nos in the village accounts seem also to be referred to in the Survey registers. This explains the arbitrary mode of forming fields to which Mr Hall has alluded as well as that portion of his letter forwarding Capt Priestley's report where he observes "I do not see

P.2.

that

130

"that much advantage is gained by having "the partitions or sub holdings of fields separately "measured and shewn in the Maps. These sub. "divisions are not recognized as distinct fields "in the accounts of the cummums but are "entered as portions of the fields to which they "belong."

17. The Assessment officer will consequently experience the difficulty pointed out by Mr Hall since it will be troublesome to trace out the fields which stand in the village accounts, and ascertain to which of the new survey fields their assessments is to be charged either wholly or in part. Their owners also will be dissatisfied at having no aid to the maintenance of their titles, by a distinct or clear clue between the old Nos or fields as shewn in the Village accounts and in the Puttahs annually distributed and the new fields entered in the Survey Register. This is evident from the instance of a Survey field given in Captain Priestley's explanatory letter which only shows the Nos of the Puttahs to which its component parts belong. Such information is consequently

22nd June 1857
No 7.

8

useless as a Puttah frequently contains
several fields, and often only parts of several
fields and its number has no reference to
the Village register number of any field which
it contains. But while the assessment officers
may therefore in some places experience diffi
culty, the Board must observe that no such
difficulty would have existed if their
instructions had been followed. They directed
that entire Nos or fields should be taken
when a large survey field was to be formed
by subdividing several smaller ones, and if this
course had been pursued the inconveniencies
and difficulties on which Mr Hall has dwelt
would have been avoided, as many old field
would then have been clearly and immedi
ately traceable in the Survey Registers.

18 In searching for explanation
of the cause of this deviation from their
instructions the Board finds it in Captain
Priestley's letter to the Collector dated the 9th
March. He there points out that he considers
he was only following the directions which
Mr Hall had sent him, and gives extracts

from

"Enclosure in Coll. Mem. of 10th March 1847 & Jn. Con 16th Aug 1847

from some of the letters which he had received.
On reading these extracts the Board find
that they are susceptible of misapprehension,
as Mr Hall appears to use in some places
the words "holdings" and "fields" indiscriminately
and there are certainly passages which re
commend the course followed by Captain
Priestley. For instance Mr Hall observes.
"I think it highly important that we should
"have the accurate measurement of each
"holding as well as of each field" and again
"it would be best as a general rule that
"each holding should be measured and as
"fairly shown on the Map either by a letter
"or by a dotted line" and then he observes "in
"many instances several persons hold fields
"by joint Puttahs. in these cases it is not
"necessary to attempt to show each man's
"holding, but where a separate Puttah is given
"then it is highly desirable that the holdings
"should be also separately shown with its
"dimensions." These passages support the
"proceedings of Captain Priestley by conveying
an impression that the same importance

which

which attaches to entire fields is to be attached to portions of them, or in other words to "holdings" when in the occupancy of different persons? They are therefore prima facie inconsistent with Mr Hall's observation in his review of the survey report where he remarks "I do not see that much advantage is gained by having the partitions or sub holdings of fields separately measured and shown in the maps. These subdivisions are not recognised as distinct fields in the accounts of the Curnums but are entered as portions of the fields to which they belong"

19 To reconcile this apparent inconsistency the Board have supposed Mr Hall's objection to be the careful retention of all fields entered in the Village accounts - and only a measurement of these subdivisions with a record of them in the survey registers and Maps only when they are held by different parties and included in different Puttahs. In his explanatory letter Mr Hall however makes an alteration on the 2nd

print

Para 27

* See the last paragraph of para 15 in pursuance of G.O. 13th March para 6. and Con 15th May 1857 at 790

15

print, and says that he contemplates the measurement of portions of fields or holdings only "when they happen to be undefined portions of enclosed fields" - At the same time Mr Hall gladly acknowledges that from his notes Capt Priestley could hardly have concluded otherwise than that he "deemed it desirable in a revenue "point of view that every holding should be "measured separately." - This detail has been entered into by the Board in justice to Captain Priestley, who received from the Collector no assistance wanting in clearness, and who had been experiencing difficulty in obtaining from the Curnums accurate information of the fields as they stood in the Village accounts.

Para 4.

20 On considering the general question as to what course it is best to pursue in future, the Board see no occasion to alter the instructions which they gave at the commencement of the survey and which met with the concurrence of Government. It is highly important, as a measure of administrative policy and with a view to the saving of labor and expense at the survey,

that

that a minimum size should be fixed for Jilas,
and if several of the present small Jilas
are taken in their integrity to form a new
larger one, the Board do not see that dif
ficulty or embarrassment can arise - Since
the old distinguishing Nos which are found
in the Village accounts, Pottahs, deeds of sale
&c will then be traceable in the details of
the Survey registers - Thus far Mr Hall
has consequently only been advocating the
course always intended by Government and
the Board, but he appears to have overlooked
the imperfect means which Captain Priestley
had for carrying it out. The Surveying
Officer must procure from the Revenue Au
thorities those accurate preliminary details
of existing Jilas which Captain Priestley
justly claims in his letter of the 9th March,
but from the want of European Officers
in the District, as Government are already
aware, it has not been practicable to employ
one of the Collector's subordinates on the
special duty of aiding the Survey, and
this want has not been sufficiently supplied

by

In From Collector 13th March in Con 15th May No 983.

by assistance from the superior Native revenue
servants - Captain Priestley has thus had
mainly to depend on the information obtained
by him from the Cummums and Villagers, and
though Mr Hall gave in the present year
the services of a Sheristadar whose general
assistance is most highly spoken of by Capt.
Priestley, Mr Halls remarks in the final
paragraphs of his letter of 13th March shew
that he does not appreciate the difficulty
under which a Surveying Officer, a Stranger
in the District, must labor, unless the Revenue
authorities, collect clear information of ex
=isting Jilas for him, "preparatory to their
being measured."

In Con 15th May 1857 No 983.

21 The present Survey having been un
dertaken as "an experiment" it was to be
expected that some imperfections should
prevail at its commencement, and the Board
object in their present remarks is to
profit by past experience in expediting
and rectifying its future progress - They
would therefore strongly express their con
viction that it will not be advisable hereafter

for

for the ofprimed operations to be kept so much to the surveying officer. Instead of this the servants of the Collector or assessing officer should not only fix the Village boundaries but provide out the fields according to the Village registers, and aid in subdividing them into large survey fields. The surveying officer would then work with confidence and despatch, and the task of fixing the appointment would be afterwards performed without any difficulty in distinguishing the fields. The Board have also found that as a general rule entire fields should be subdivided together, to form the new survey fields but this need not be invariably done. In some instances the partition of the subdivisions into which fields have fallen and the particular manner of their occupancy may render it advantageous to depart from the rule, with a view, for example to unite the holdings of an individual in one new field, and no confusion will result from this arrangement when it is made by the surveying and assessing Departments acting

See Capt Bradley's letter of 22nd March Para 12. Do from Collector 28th March in Do 15th May 1867 No 1200

17 03

12

acting together, and after accurate details have been collected of the old fields for insertion in the Survey Registers. In short the two essential points to aim at, in the Board's opinion, are 1st, that the surveying officer should not be delayed by want of information regarding the existing fields, and 2nd, that when the measurement have been made and the survey registers of a Village has been so drawn out, the assessing officer should be able to proceed to his duty with ease and confidence from having an accurate knowledge of the materials or component parts which have been brought together to form each new survey field. Hereafter when the general survey has been organized the Board hope that the work of the assessment officer will commence speedily the survey operations are finished.

22. After large survey fields have been formed in the above manner the degree in which them subdivisions are to be recognized in the maps by dotted lines must be left much to the discretion of the survey officer acting in communication with the local revenue authorities

authorities - much will depend on the natural peculiarities of the fields and on the manner in which its subdivisions are occupied - The General rule must be to avoid much detailed measuring, especially where it is apparently safe to leave "the component holdings to be adjusted by the Commons" (Collector's letter of 13th March 1877) or other District servants. See Con 15th May No

23. If these views are approved of, they can be acted upon without difficulty in the continuance of the Survey, and meanwhile the Board will instruct Mr Hall to take all the advantage he can of Captain Priestley's Camera being still in the District to go over the Survey field Registers with them and more especially in the Shellum Brum, Mondagody and Cudalore talooks, for the purpose of removing difficulties in the process of distributing the new Assessment - They will also call on the Collector of Trichinopoly to report, after conference with Captain Priestley, what course has been there pursued with respect to fields though no anticipations of difficulty have reached them on the subject

From

1

1873

B

from that Collectorate.

24. It only remains to observe that in the papers now under consideration allusion has been made to the objects as they stood at the time of the early Pymash, or rough District Survey - Between 40 and 50 years have since elapsed, and during that period many large sized fields have been broken up through decrees of Court, family partitions, partial sales, &c. The idea has therefore been started whether the object of having large fields could not be attained by having out these divisions and restoring the ancient fields - The Board do not however consider it necessary to dwell on this subject as the labor and expense would exceed the worth of the result, even if there was any certainty of the wished for result being obtainable.

25. In the appendix Capt Priestley sets forth fully his reasons for considering the Ryotwar system of Survey combined with village boundaries taken by Cameras, as best suited to a country where land is minutely subdivided and in p. 33 of his report he points out that the

the difficulty anticipated in carrying out this System has been quite overcome. "I think I may venture to say" Captain Priestley observes "that the difficulty has been overcome, and that too when the subdivision of fields have been infinitesimal. The discrepancy found between the sum of the fields measured by an ameen, and that obtained by the Scientific mode of computation is generally so trifling as not to be worthy of notice." Table B already referred to more than once in these Proceedings shew the difference in 100 Villages chiefly unirrigated, taken at random, to be only 0.72 per cent while that in Enc. N.9 in 813 of 1857
40 Villages for the most part irrigated, is 1.37 per cent. This result is most satisfactory as establishing the practicability of the plan pursued and as shewing that the operations so minute in themselves, have been carried on under able and watchful supervision.

26. The question of the Establishment including an increase to the Salaries of Lieut.s Ropley and Pratt, requires only a passing remark as it will be more properly disposed of

19

when the scheme for a general survey comes under consideration. The present strength of the Establishment is 3 Uncovenanted officers and 30 Survey Ameens with the other officers necessary to complete the Establishment. Inspection Superintendence is the most expensive item, but with three European officers as at present Captain Priestley is of opinion that the Native Agency may be considerably enlarged. He would try 40 Survey Ameens in the first instance and if it is found that the Superintendent and his 2 assistants can keep pace with a larger number of Ameens he would in that case appoint 50 of that class.

Report p. 19

27. Both Mr Hall and Captain Priestley recommend that a Lithographic press may be attached to the Survey office. The Saving in time Captain Priestley says would be very great, as it would obviate the necessity of watching a copy of each village map a process which, with the necessary verification with the original, entails as much labor as the preparation of the Map in the first instance. At present the Maps are sent to Madras to be lithographed. The maps of 10 villages only have been

Mr Hall's Let. 24th Feby in Cons. 13 March 57 p 26. Capt Priestley's Let. 22 Feb. p 21.

been struck off. Mr Hall does not mention the charge. Five copies at least of each village Map will be required. In a former communication dated 11th October 1856 No 209 Mr. Hall stated that although the value of these maps has been pointed out to the land holders a desire to possess them had not been excited. The Ryots expressed themselves satisfied to go on without them. Until the survey itself is appreciated by the people and a plan is adopted of exhibiting the separate forms and no charge made than at present, it seems unlikely that any great demand for maps will spring up. To be acceptable to the Ryots individually each should be able to recognize his own fields in the plans with their exact forms and boundaries. As the survey progresses means will doubtless be discovered of furnishing what is required.

Resolved that Copy of these Proceedings be forwarded to the Collector of South Arcot who will be pleased to furnish with

1 Copy for the Village Authorities
1 do for the Collector
1 do for the Tahsildar
1 do for the Sub Collector
1 do for the Superintendent of Survey.

Sd/- 3 January 1857.

208

with the least avoidable delay the information called for in paras 10 and 12.

Resolved further that copy be furnished for the information and orders of the Right Honorable the Governor in Council.

(A true extract.)

H. Stokes

Acting Secretary

To

H. Forbes Esq.

Acting Secretary to Government

Pub. Department.

E. Hall.

Rec.d 1857 Depart.t

D.o to Comp.y Gen.l July

No. 558

Extract from the Proceedings of the Board of Revenue.

Dated 15.th May 1857.

Rec.d 18.th May 1857.

No. 1603

42 Enclosures.

J.C. No. 6764 July.

Extract from the Proc.s of the Bd. of Rev.e Rec.d 4 July 57 No. 1603 in

Reviewing the past operations of the Revenue Survey in South Arcot conducted by Captain Priestley and submitting the Reports &c. on the subject.

No. 15.

Copy in a G.l L.r to C.S. Dat.d 8.th Oct.r 1857 No. 35 Paras 16 to 35.

C 13 June 816.

29
B

No 46

From,

Colonel C. E. Faber

Chief Engineer Department of Public Works

To.

G. S. Forbes Esq

Secretary to the Board of Revenue

Fort St. George.

Sir,

In compliance with the request contained in your letter of the 19th March I do myself the honor to annex the estimate therein called for, it is for 50 and 100 Copies respectively.

I have the honor to be

Sir,

Your most obedient Servant.

Government Lithographic Press, Central Office of Public Works, Fort St. George 1st April 1856.

/ Signed / C. E. Faber, Colonel

Chief Engineer C. P. W.

Memorandum

Memo: of the cost of Lithographic Sketch of Village Plots on Sackville Street

Village of Williamstown Moray - 1 Perch = 1 Acre			
Scaling new	"	"	
Do.	"	Copying	
Granadam More	"	Do.	
Do.	"	1 Perch = 1 Acre	
Ardclogh Glen	"	Do.	
Do.	"	Copying & mounting	
Cuil a Machair Settlt.	"	Do.	
Do.	"	1 Perch = 1 Acre	
Ballalum	"	Copying & mounting	
Do.	"	1 Perch = 1 Acre	
Newtongalum	"	Copying & mounting	
Do.	"	Do.	
Ricardstown	"	1 Perch = 1 Acre	
Ballathomond	"	Do.	
Ricardstown Settlt.	"	Do.	

Total for 350 Copies including paper	Pounds	398
Add the Cost of paper for 50 more copies	"	32
Total for 400 Copies including paper 12½	"	430

Government Lithographic Office, Custom House Offices, Phoenix Park, 1st June 1857

E. Slater Clerk
Chief Engineer D. P.

Copy in a Gr. to C
of 5th Oct. 1857 No 35
Pages 16 to 35.

No 1030

From
The Chief Engineer
D. P. W.

Dated 1st April 1856.
Enclosure 1.
In Corrs: to 8th September 1856
No 46.
P 558/57

Giving the Estimated Cost for preparing certain Survey Maps of South Street

Orig to Surv
15 May 57

C 7 July 57
No 15-16

No. 193. 24 B

From J. D. Sim Esqr.
Acting Secretary to the
Board of Revenue

To A. Hall Esqr.
Collector of South Arcot

Sir,

I am directed to request that you will furnish explanations on the following points in connection with your letter 24th In Cons. 13th March 1857. February 1857, No. 51, regarding the Survey operations under Captain Priestley during the first year.

Table B furnished by Captain Priestley shows the number of Survey fields and the number of their subdivisions, together with their areas in certain Villages selected for the purpose. The headings of this Statement are as shown in the Margin. It should be explained, whether the Survey Numbers as corrected

Survey Nos. Fields subdivisions Corrected by Measure. Nos. by Estimate.

93-4
94-4
96-4
96-4

60-4
1-1-4
62-7
65-4

expressed with the numbers of fields as entered in the Village Accounts, and if this is not the case, it should be stated on what principle the extent of each Survey Number was regulated.

3. Explanation should also be afforded as to the leading Pattah Subdivisions whether the holders of these subdivisions are distinct from the Ryots who are the occupants of the land entered under the head of Survey Numbers, and if the Survey Numbers and Village fields are identical under what circumstances Pattah Subdivisions take place.

4. Again, supposing the Survey Numbers and the Village fields to be identical, you will explain whether there is any difference between this mode of measuring lands and that advocated by you in Para 28 and 29 of your letter under consideration, in both cases what is called Pattah Subdivisions being omitted.

5. It should also be stated, whether the area in Table B is intended to be expressed in Acres or Cawnies.

Again, following Table B it is seen that the averaged extent of the Survey Numbers in the irrigated lands is not materially below the extent, viz: 2 Acres, which in the original instructions as to the mode of conducting the Survey to Captain Priestley was allowed to adopt. Besides the Survey Numbers, Captain Priestley has measured the Pattah Subdivisions. If the latter are omitted in future as you have proposed, the expenditure as well as the time occupied in measuring the lands will be pro tanto reduced, but it does not appear that there will be much, if any, further difference in these respects by making each Survey number of the full extent of 2 Acres. This point should be more fully explained, as it appears from Captain Priestley's report that both time and money

journey may be largely saved by adopting the prescribed extent of 2 Acres.

Revenue Board Office,
Fort St. George,
13th March 1857.

I have &c.
(signed) C. D. Lind.
Acting Secretary.

(A true Copy)

C D Lind
Acting Secretary.

Copy in my Ltr to Govt
Dated 8th Oct 1857 No 35
Paras 16 to 35.

1857 Depart.

26

Enclosure in an Extract from the Proceedings of the Board of Revenue to the Secretary to Government R.D. dated 15th May 1857. No 1603

R 558/57

Copy

To South Arcot dated 13th March 1857.

Regarding the Survey operations

R 558/57

27 B

R. C.

1856

Extract from the Minutes of Consultation
Under date the 4th July 1857.

Read the Extract
from the Proceedings of the
Board of Revenue -

(Here enter 13th May 1857 p. 1 to

4
96

1 In these proceedings
the Board of Revenue
review Captain Priestley's
report of his operations in
the South Arcot and Tri-
chinopoly Districts from
1st November 1855 to 31st
October 1856.

2 In Para.s of their
proceedings

proceedings the Board
draw up the results in the
following terms.

"The total area surveyed
was 450 square miles
including both cultivated
and uncultivated lands.
The operations embraced
the Taluks of Tiruloor
in Trichinopoly and that
of Chedambaram in South
Arcot, the former consist-
ing of 19 and the latter
of 10 Villages. Some pro-
gress has also been made
in the Mannargoody Taluk
of the last mentioned Dis-
trict. The number of Fields
measured was 20,339, their
extent 22,453 acres. The
number of

Captain Priestley's rep
Encl. 3 in No. 812 of 1859
Para 13 & 22

Encl. 5 in No. 813 of 1859
Table A in Appendix of
Report.

Off. Memo. from Asst. Secy.
Board of Revenue.
dated 20th May 1859. No. 1695.

Sanction Sept. 1854.
Completion July 1859.
Calculate from Octr. 1854.

number of Surveyors employed was 30, and their average daily work 3 fields with an area of 3 acres."

3. From a subsequent communication from the Board of Revenue the Government have learnt that it will take but two more the Cuyer to finish the Mannargoody Taluk. The whole of the South Arcot District will then have been surveyed in 5 years from the sanction of the Government of Sir Thomas Pristley being communicated to Capt. Priestley considering that when he arrived at Cuddalore in Septr. 1853, so far from finding a ready organized Depart-

ment, he could not obtain
no man possessed of even
the most elementary know-
ledge of surveying, the
Governor in Council
took upon the result
attained as in the highest
degree creditable to the
Superintendents energy & ability
& regret that are derogated
by expression by the Collector
of Southern Districts (whose
work is fully acknowledged)
relative to the formation
of new or survey Fields,
should have in any way
tended to diminish the benefits
which must be derived by
the people and the Govern.t
from an accurate survey

of the land.

Board paras.
Ryots. Rs. Rs. Rs.
Jan.y 31st 1854 - 60
1853 293
1851 450
Ryots

5. On the whole area surveyed, the cost has been Rs 53 12-10 per acre. This is large in comparison with the Estimate Rs 46-8 cost with the cost of the Bengal Survey, but due consideration must be had to the fact, that much more minute holdings have been measured by Captain Priestley than were surveyed in Bengal & that the I. M. S. and that greater accuracy is said to have been attained by the combination of the chained method with the previous by traversed boundays

but

but as the same method was
the Government thinking
pursued on Bengal and
the North West Provinces
the force of the latter argu-
ment is not apparent.

It was calculated
at first that each tower
would measure, on an
average, 80 feet per day.
The chief cause of this
standard not being
attained would be found
that they are required to
measure each distinct
cultivated field, which
according to the present
plan, comprises often
two or more of the small
patches of cultivation

should

300

should be clubbed together
to form a separate number
for measurement.

The work performed in the year under
review was more expensive than that
done in the year previous
and greatly in excess of that
done in 1834, so far therefore
but is satisfactory, but
it must be remembered
that the full strength of
the Establishment has
not been put for the for
a whole year continuously
with during the one under
review, and that therefore no
fair comparison can be
be drawn, between 1835, and

the

the two previous years.

But considering in the abstract, the amount of work done, and its cost, the Government concur with the Board in their expectation that the Estimate of 44-8 will probably not be much exceeded ultimately, when operations, on an enlarged scale are systematically undertaken, and also in thinking that reliable data have been obtained for estimating the probable performances of a survey hereafter.

It is satisfactory to observe that the Revenue authorities

Board para 4.

Captain Trevelyan's Report paras 4.5. Board P. 4.

authorities in Yorkshire only did their best to lighten the Superintendents labours, but Government regret that in spite of their efforts much opposition has been encountered. This opposition was in some cases more than passive. The field and other marks were neglected, and even removed, causing much delay to the operations, and in some places rendering a re-survey necessary; inconvenience was also felt from the Village Officers not being in attendance when required. These will since now gained be of most useful

useful in carrying out
the general survey through-
out the Presidency; in
that the obstacles likely
to present themselves will
be foreseen, so that measures
may be taken for their
removal. If it appears to the
Governor in Council that
the Village Officers should
be made personally respon-
sible for the state and safe
Custody of all marks left
by the surveyors, and the
summary punishment
in a few instances of those
who refuse or delay to attend,
will probably go far to put
a stop to delay from this
cause. Government fully
admit

32 63 admit the importance of a
Revenue officer, possessing
immediate authority over
the Villagers being attached
to the survey Camp. Piemast
Districts, at the present
time, the paucity of European
agency will prevent one
of the Covenanted Asst
lands being available, but
it will generally be practi-
cable to detach an experien-
ced native Revenue
officer, as was done by
Mr. Hall, the benefits
resulting from which
measure are thus described by
Captain Priestley. "Sir. It
"I espy not with no kind-
"rance worthy of mention.

Report p. 9.

The

"The Sheristadar was of the
"greatest assistance, not only
"in adjusting disputed
"boundaries, but also in
"compelling the Ryots to
"perpetuate field marks,
"and in Superintending
"the erection of Taloke and
"Village boundary marks,
"on the exact spot laid down
"by the Survey."

8. In Para 2 of Mr. Walls letter to the Board of Revenue of 28th of 24th February 1839, it is said that the aggregate charge on account of this Officer and two Peons who were attached to the Survey Camp, was Rs. 210-12-5, and that

Collr's letter p. 1
Rev. Board p. 6
Supt. p. 4-5

Statement A
Board p. 7.

33
83

that this was debited to the Survey, other servants being entertained by the Collector at a corresponding expense to supply their places. There will be no difficulty in adopting a similar course in future, but these and all similar arrangements connected with the conduct of the general survey will be determined by Government in communication with the Officer appointed to conduct the duty.

9. From an enclosure in the Superintendent's report, it appears that no less than 2,599 days were lost by the thirty Canarese variou

various accounts of the
total, 372 days were lost
in travelling, as appears
by col.2 of the statement,
but, probably from a —
clerical error, the number
of days is stated, by the Board
been only twenty. The
latter item of loss was
chiefly owing to a divided
sphere of operation when
the Trial or Palook was
completed, the Ameens had
to proceed to Chitambaram,
but besides this, they were
on several occasions obliged to
return to correct or test their
former work, and thus
much time was lost. The
allotment of compact fields

of

p. 7

of duty will in future remedy
a great part of this evil, and
it is to be hoped that the —
time (1084½ days) lost by the
non attendance of Village
servants, will, if energetic
and proper measures be
adopted, ultimately disap-
pear.

34
08

10. The boundary marks
that have been adopted are
two fold, to mark places
where two Villages join,
square pillars of masonry
with pyramidal tops have
been erected, and where the
boundaries of three or more
Villages meet, similar —
pillars with flat tops —
have been constructed. The

average

average cost of each Pillar
was d. 4 ll. 5 s. 4. The question
as to who shall bear the cost
of their erection has formed
a matter for discussion
between the Warland the
Superintendent, the former
considers that they should
be paid for by Government,
while Captain Priestley
would saddle the Districts with
their cost; inasmuch as many
lines laid out tends to swell
the apparent cost of the survey,
if charged to that Depar. H.
M. Government observe
that in the North West
Provinces, the fixing of the
Boundaries is carried on
by a distinct Establish
ment

35
B

ment specially appointed
for the purpose, who precede
the survey in such a way
that the Surveyor may always
find adjusted Boundaries
These Boundaries are
marked by Mud Pillars
at each principal angle
or bend of the Boundary;
In small Cases where two Villages
meet, and at a Reputed
pillars about 5 ft high
It does not appear that the
Villages are made to pay for
these Pillars, the cost of
which must be very trifling
they being merely of mud.
In favor of the boundary
marks being erected at the
cost of the Village it may be
argued that they would on

the

of Town Coll. p. 12. 13.
of Town Supt. p. 22. 30.
Rev. Board. p. 5. 45.

that account be better pro-
tected from injury, but the
Government will issue no
general or definite orders
upon the subject, until
they are in a position to
organize an uniform
system for the whole of the
Presidency in communi-
cation with the heads of the
Survey and assessment
Departments. Meanwhile
it appears that Captain
Priestley has directed the
persons employed in
Superintending the fixing
of the boundaries to make
adjoining Villages pay
for a pillar alternately —
~~so far enough if a Village~~
~~adjoins, and a line of pillars~~
in

Capt. P. to 15
Capt. P. 19 25
" P. 13 25

37

~~expected to meet the Govt.~~ 36
~~to pay the cost of the~~ 36
~~Survey~~ Government will not
disturb any arrangements that may
be approved of by the Board, who
state that they have called for further
information on the subject
to . In para 12 the Board
state that they have called for more
information as to the means adopted
for ascertaining the boundary of field
& Countries where stones are to
be had ready means or at hand
for fixing permanent field
boundaries, or Pillars, where stones
are not obtainable, records of such
or trees appear to be the best substitute
15 The Government now pro-
ceed to notice the misunderstanding
alluded to in a former para, as
having arisen between the Collector
and Capt. Priestley relative to the use of the
fields, owing to ambiguous expressions
in Mr. Hall's letter to Capt. Priestley
16 In the 16th following para
of his report, Capt. Priestley thus
expresses

expresses himself

p. 16-18
Coll. p. 17-05
B2 p. 10-05

xxx "I have not to Remark
"vantage of the power given Sam
"ed me to measure fields
"smaller than 3 acres in
"dry and 1 acre in wet
"land clubbed together, until
"that minimum was reached.

" *** I was induced to
"deviate from my instruc
"tions on this point in con
"sequence of the strongly
"expressed opinion of the Collectors
"of Southern Circuit, who considered
"it highly desirable, in a revenue
"point of view, that each holding
"should be measured.

15 I should wish to have more
"explicit instruction on this head" &c.
"all in the letter of 2d February
"upon the difficulties which
"I

37
3

he considers must arise
from the Survey Officer
having formed fields in an
arbitrary manner, instead
of taking them as they
stood in the Village
accounts. He Board
explains this discrepancy
It appears that the
instructions to the Superin
tendents were susceptible
of misapprehension
particularly as to the
signification of the
use of the words "holding"
and "field"

p 13 "I wrote to call down
"in the first instance for
"the assistance of the Sub
"ordinate Officers that
"whose services could
"

field

fields come together, consisting an area not exceeding one acre irrigated, and 3 acres unirrigated land, they might be surveyed by the Surveyor in one, noticing however in the Register the fractions of each small included field, as per old village records.

10 The course pursued by Mapdan Booty has been to measure and map each sub division as defined by ridges after field had been formed by clubbing together several contiguous fields

7

of land and those on ground pieces of land been bandy parts of fields as entered in the village Register as the case might be surveyed one piece consisting, and thereupon the Patlah to number of the Patlah in which the fields belong and not the number of the fields themselves in the old village records, has been entered in the new Survey Register. Subdivisions of fields by formation of fields in the course to which the Patlah is taken for Register, and in the case where the area

treated

ment to be recommended,
but as intending what
he freely admits
that his words might
be misapprehended.

Mr Howard (pg)
then describes the con
sequence of this pro
ceeding, and the Go
vernment must justly
answer in their remarks
The Agricultural Asso
will consequently
experience the diffi
culty pointed out
by the Bill, since
it will be troublesome
and to trace out
the fields intend
ed on the Valuation
Accounts, and ascertain

to

39
8

to which of the new
survey fields their
assessments is to
be charged, either
entirely or in part.
The owners of the re
land will be discon
certed at having
no rule to the main
tenance of their title
by or [illegible]
clear idea between
these Nos in fields, as
the Village
accounts, and the
distributed, and the
new fields ordered
in the survey pg
[illegible]

"is comparatively use-
"less, as a Pattah fre-
"quently contains a
"several fields, and often
"only parts of several
"fields, and its number
"has no reference to
"the Village Register
"number of any field
"within it contains".

The answer by pencil short
to which Mr Hallinand
of Clonmel has point-
ing out that the fields,
as entered in the Village
Registers, have not been taken
in their integrity for forming
the survey fields, but portions of
them, of which no portion was

exist

ments, have been made use
of as its component parts. It is
not to be gathered from the papers
before Government in how many
Villages this faulty survey has
taken place, but it must be re-
flected at once, and the Board's
original instructions adhered to.
Government are glad to find no
that in Enclinophy every field
has been measured

The Government
18.
remark that the error now
more clearly detailed was not
prominently referred to by the
Board in their proceedings of
the 6th May 57 at 433, which were
replied to by Government under
date the 8th Instant at 554. It was
then ordered that advantage
should be taken of the presence
in the district of Mr Grant, the
additional sub collector, and
that his services should be
made available in tracing
in

in the new survey registers the fields as entered in the village registers, and in making such preparation for the assessing officer, as will enable him at once to proceed with his duties, without hindrance from the results of the ambiguity of expressions made use of by the Collector in his Communication with the Superintendent of the Survey.

19 As stated by the Board in the latter part of Para 21, it needs not to be held as an unalterable rule in the future progress of the Survey, that entire fields shall be clubbed together, tho' such a course should

4/3

generally follow: ed, the position of the sub-divisions into which the fields have fallen, and the particular manner of their occupancy, will sometimes render it advisable to depart from the rule.

20 The Governor in Council determines the degree in which the subdivisions of the Survey fields are to be measured, and shown in the maps by dotted lines, being left to the Survey officer acting in communication with the local revenue authorities.

21 At the close of

of para 13 of his letter
of 13th March 1854 to the
Revenue Board, & the
Hall remarks I do
not think there would
be found any neces-
sity for the Revenue
authorities, as Lieutenant
Greatley suggests, to
take steps to renew the
old Survey fields &
marked out, preparat-
tory to their being
measured.

22 The Board
of Revenue have just-
ly in the opinions of
Government recorded
their views in this respect,
to the effect that the

42 03

the Collector wholly fails to appre-
ciate the difficulties under which the
Surveying Officer, a stranger to
the District, must labour, and of
so convinced as Government
of the necessity of a Surveyor finding
every thing ready for him, that
the attention of the Officer who
may hereafter be appointed to
superintend the Survey of the Pres
should be called
to the commencement that
would result, could the rough
sketch which the party preceding
the Surveyor will give to him
showing the boundaries and
general contour of the Village, contai
also a general sketch of the road
as it is called in the North West
exhibiting the position of the
fields as entered in the Cowman
Accounts. This would facilitate,
to a very considerable extent, the
labours of the surveying party
and greatly economize time

A

23 The satisfactory result

of the operations, so far as correct as yes, the account ascertained by traverse varying only 0.72 per cent from that measured by the admeasurement, will be brought promiently to the notice of the Government of India. The Governor in Council presumes that due care was taken by Captain Priestley to conceal the results of his scientific computation from the Ameens, in order to prevent their meeting up their totals to correspond.

Supt Cmds No 9 of 8th p 187
Rec Bk p 20

24 No orders can now be passed on the subject of the salaries of Lieutenants Keppel and Bate.

Bk p 21

25 The Superintendent shows that he being allowed to have a Lithographic press attached to his survey office would be a great saving of time and expense. It appears that it now takes up as much time, and is almost as troublesome, to make an accurate copy of a Map of a Village, as to plot the original. The Government agree that it would be most advisable that these Maps should be lithographed under the immediate superintendance of the Officer conducting the survey instead of as at present being sent to Madras to be copied by the Photographic Office. It will be for the Superintendent to state whether he thinks it would be good enough to state if any fee should be available in this Country.

43
8

Margin of last para of Bk Corr

26 It may be observed that the Collectors and Public Officers are both mentioned by the Board as requiring copies of the Village Maps. There appears to be no necessity for supplying

Collector with maps of villages
Collector
of the Sub Division ... still
... the Government are of opinion
... that ... at the least of
... the map of each village should
... be struck off. That under present
circumstances, the Ryots should
... have exhibited much desire
to possess maps, can hardly be
... surprising.

The Government ...

... a copy of part of ...
... Report,
... with reference to the ...
... made at the Gun Carriage
Manufactory ...
for ... information.

"I strongly ...
" all ... from ...
" Of those ... from the Gov...
" Manufactory not one of the ...
" to agree with the standard ...
" first arrival, ...
" ... stretching they have ...
" constant source of delay and ...

Struck ...
the ...
... the ...

Copy to the Bd of Rev
... Prop 26
... to the Chief ...
... Gun Carriage
Manufactory ...

4th ... G. L. to E.
4th Octr 1857 No. 35
Pns 16 to 35

19-7-99.
31-5-10.
17-2-20

Copy of the Bd's Pro.
Order & this Repn
Sent to Mr Ravile
18 Sep 1857 - B. 95

1/1588.

Revenue 1857 Depart.
... July
No. 76
K 4/B

Extract Minutes of ...
14th July 1857

Pro. of the Bd of Revn 14th July
1857 C No. 774 & 775 in ... 17 Sep

... Revenue ...
... Progress ...
... Arrears and Revenue ...
... from ... to ...
October 1856

No 67
of
Arrolow

Odayavuvteyanoor

Measured by P. Muttusawmy Nadar
Field Plotted by Varrakulasinga Pillay
Traced by Varrogapalnaick
Plotted Measured by Kistinawmy Nadar
Varrogapal Nadar

Measuring Ac. R. P.
362 30

Ottoothamaer

Examined by P. Muttusawmy Nadar
Examined by Varrakulasinga Pillay
Examined by Field Book
Examined by Sami Pillay
P. A. P. Iyahawmy
Examined & Plotted Fair by Sinnadeiawmy

Reference
Nuttam
Kungan
Ds Carunakar
Kompah
Ds Carunakar
Solaikal
Water
Channel
Anaicut Carunakar
Fair By P. Nauyagen
Rough By Sinnadeiawmy
Rough Square
Colour
Examined
by Sinnadeiawmy

67
Jofe

A

