M.R.O. 14—10,000—21-4-22

MADRAS RECORD OFFICE.

Government of Madras.

Revenue **DEPARTMENT.**

G.O. No. 1607	Press Mis.
249-251	
Dated 15-9-	1860.

Not to be folded or roughly handled

Proceedings of the Madras Government, Revenue Department, 15th September 1860.

Read the following Papers :—

No. 249. Read the following Proceedings of the Board of Revenue, dated 14th July 1860, No. 3,248 :—

Read letter from the Director of Revenue Settlement, dated 22nd June 1860, No. 647.

(In Cons., 25th June 1860 A, No. 3,073.)

1. In the above letter the Director of Revenue Settlement submits for consideration, certain modifications suggested by the Superintendent of the Survey with the object of expediting the Survey. These the Board will notice seriatim.

1. *First.*—It is proposed that the area to be surveyed shall be demarcated in blocks averaging 10 or 12 acres, but on the one hand that fields consisting of soils of marked dissimilarity shall not be clubbed together in the same Survey blocks; and on the other, that where the soils run evenly over a large extent, the Survey blocks may be increased to 20 acres, the present maximum. These Survey blocks are to be plotted and measured by the regular Survey Department, while the interstitial fields included in them are not to be plotted at all, but merely sketched in by the eye, the measurement of them being entrusted to a less-trained agency, viz., volunteers or pupils of the Survey Department to be attached to the Surveyors of the blocks, and to be paid out of the Survey funds.

2. The original minimum of the Survey fields was 1 acre in irrigated, and 2 acres in unirrigated land, the details within these limits being left to the Karanams to fill up, subject to certain checks by the Survey Department. It was subsequently proposed to raise this minimum to 10 acres, provided the Karanams were found competent to fill in the details, but to this, Government demurred. Lastly, Mr. Newill suggested 2 acres in irrigated, and 4 acres in unirrigated land as the future limits, and to this, Government assented. It is not, however, clear whether the permission has been acted on or not.

Paras. 5 and 6, Procs. of Govt., dated 23rd Nov. 1859, No. 1,594.

3. There can be no question that the proposal of demarcating in blocks generally of 10 or 12 acres would greatly facilitate and expedite the professional Survey, and it will answer all *revenue* purposes, provided—

(1) That the outer boundaries of these Survey blocks are always the boundaries of existing fields, and not arbitrarily selected lines.

(2.) That the measurements of the interstitial fields are sufficiently accurate.

(3) That the eye sketches are reasonably correct, and are made in every case.

(4.) That the boundaries of the interstitial fields are marked out on the ground.

4. The same might be said of even larger blocks and of the still more extended alteration noticed in paragraphs 24 to 27 of the Board's Proceedings, dated 4th August 1859, No. 3,020.

5. The expediency of the measure depends mainly on the character of the agency to which the measurement, &c., interstitial fields forming the Survey blocks is to be entrusted. The Karanams have since been tried and proved incompetent, and there are other objections to their being employed in this way, viz., the incompetency of many of their class; their general unwillingness to be so employed; their other regular duties; the impossibility of training so large a body within any reasonable time, and the reduction in their numbers contemplated in the revision of the Village Establishment.

6. The agency of the Karanams not being available, it is proposed, to employ a "valunteer "or rather a pupil" to be attached to each Survey Amin. These pupils, it is added, would be trained men, and would be exclusively under the Survey Department. It is roughly calculated that the Survey could, in consideration of this assistance, give up 10 Rupees per square mile, and out of this sum, it is proposed to give the pupils moderate allowances, and to defray all other incidental expenses.

7. The Board regret that they are unable to support this proposition.

8. They question whether these pupils would be competent to do the work assigned to them with sufficient accuracy, and doubt whether they could keep up with the Amíns, which is absolutely essential to the success of the plan. Moreover, this inner detail work is of the greatest importance to the Raiyats, and cannot be roughly done merely to gain time, without sacrificing their interests and lessening the practical value of the Survey to the land-holding body. Little will be gained by a scientifically accurate Survey of the country in 10-acre blocks, if at the same time, each man's Estate is not also surveyed with sufficient accuracy. The Board have no confidence in the agency proposed, and do not see how effective supervision can be exercised by the Survey Department. Moreover, if, as the Board understand the scheme, the interstitial fields are not to be marked either on the ground or plotted into the maps, the Survey will, to a certain extent, lose its valuable features of permanency and comprehensiveness.

9. The example of the Trichinopoly District shows that under proper arrangements, the Survey can do all that was expected from it, and, therefore, that the change now proposed is not necessary for the fulfilment of the original scheme.

10. Moreover, before the Board could propose a general alteration of this character, it is necessary that the gain expected in time, &c., should be more clearly stated.

11. As regards the Godavery District, where the Demarcation has been allowed to get so much in advance of the Survey, the Board think that the proper course is to strengthen the Survey parties, rather than by the proposed plan to give up so much of work already done. It is much to be regretted that one process of the Survey should thus have been allowed to outstrip the other, and great care should be taken to prevent this in future. Captain Priestley's operations must obviously be so greatly facilitated and expedited by being commenced as soon as the Demarcation is completed, that he should always be consulted both as to the progress and locality of the latter work.

12. *Secondly.*—It is proposed that the Settlement Department should form their settlement on the field areas as calculated by the Survey Amíns from their field books, without waiting until the areas are verified by plotting or examination; and that the settlement formed on this basis should not be affected by errors of measurement within a limit of 5 per cent., in the way either of excess or deficiency, in the areas as taken from the field books.

13. The Board see no objection to this as a temporary or occasional expedient, but they think the proper course is to expedite the Survey itself, so that the basis of settlement may be the most correct available. It seems to the Board a mistake to incur so much expense, &c., in a professional Survey, and yet deprive the people of the fullest benefits attainable from it.

14. The transfer of the Survey party referred to in paragraph 19 has already been sanctioned by Government.

(A true Extract.)

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

No. 250. From H. NEWILL, Esq., Director of Revenue Settlement, to J. D. BOURDILLON, Esq., Secretary to Government, dated Narsarowpet, 4th August 1860, No. 753.

Sir,

Dated 4th August 1860, *No.*

The Proceedings of the Board of Revenue of 14th ultimo, No. 3,248, being now before the Government, I have the honor to forward copy of a letter to their Secretary in further explanation of the plan of Survey proposed by me in my letter to the Board, dated 23rd June last, No. 647, with the hope that it may be considered in the disposal of the matter, the Board in the meanwhile having an opportunity of forwarding any observations on the arrangements proposed.

From H. NEWILL, Esq., Director of Revenue Settlement, to J. D. SIM, Esq., Secretary to the Board of Revenue, Fort Saint George, dated Narsarowpet, 4th August 1860, No. 752.

Sir,

Received on 25th idem.

1. I have the honor to acknowledge the receipt of the Proceedings of the Board of Revenue, dated 14th ultimo, No. 3,248, and to offer a few explanatory remarks on the subject.

2. In paragraph 2 the Board state that it is not clear whether the permission to increase the minimum size of Survey fields from one and two acres to two and four acres respectively for irrigated and unirrigated fields has been acted upon. This modification was made immediately on the sanction of Government. The result of it has been greatly to increase the labor which devolves on the Karanams in measuring the details, and further, I may add, that with the demands upon their time for the Inám investigations, the Demarcation and Survey operations and other duties have not allowed of their undertaking this duty to any considerable extent. As explained in paragraph 59 of my Annual Report for 1858, the Karanams cannot undertake the inner measurements till after the professional Survey, and must, therefore, follow long after the Settlement operations in the fields have been concluded, so that supervision by the Settlement Officers becomes impracticable after they have so far removed from the locality or perhaps are transferred to another District or Division of country as will be the case with the Godavery party, as well as that which has just completed the late Masulipatam District.

3. The Board in paragraph 5 of their Proceedings make the expediency of the measure proposed by me in communication with the Superintendent of Revenue Survey to "depend "mainly on the character of the agency to which the measurement of the interstitial fields "forming the Survey blocks is to be entrusted." They in the same paragraph show that "the "Karanams have been tried and proved incompetent" and give other objections to their being employed in this way, viz.:—

(1.) The incompetency of many of their class.

(2.) Their general unwillingness to be so employed.

(3.) Their other regular duties.

(4.) The impossibility of training so large a body within any reasonable time and

(5.) The reduction in their numbers contemplated in the revision of the village Establishments.

4. I would submit that the whole of these objections apply with more or less force to the Karanams' measurements of details of two and four acre blocks under the present plan, and that while condemning such agency for the ten acre blocks, the Board show the same to be almost as objectionable for the present lower standard of Survey blocks.

5. The training required is pretty much the same in either case, and the incompetency in the first objection and the time in the fourth objection would apply equally, while the other objections are only influenced in a measure by the enlarged task if ten acre blocks are adopted, and this difference again is adjusted by a longer time being taken for the work.

5. It is admitted in paragraph 3 that "the demarcation in blocks of about ten or twelve acres "would greatly facilitate and expedite the professional Survey and answer all revenue purposes" under certain provisions, regarding the fulfilment of only one of which there seems to be any doubt entertained, viz., the measurement of the interstitial fields. The question then is whether the details of such blocks can be done as well by trained pupils in the Survey Department as the details within smaller blocks of two and four acres can be done by Karanams? It cannot, I think, be doubted that a limited number of pupils trained to the work and kept permanently to it, will be more efficient than the temporary employment of Karanams, among whom there is often little selection, frequent incompetency and always a dislike to the work, the valid excuse of numerous other duties, and above all, as mentioned in paragraph 12 of my letter, a temptation to fraud and irregularity as they are interested almost always in Inám or Government lands in their villages in which they measure.

6. The Board state they have no confidence in the agency proposed, but as a permanent agency it certainly can be brought to a greater state of efficiency than that of the Karanams, which is only of an ephemeral character, while the trustworthiness of it may be expected to be certainly not less, as it has not the same temptation from self-interest. As to supervision, I have already pointed out that the Survey Department has its numerous Officers and Surveyors scattered over the field of work, while it may be added that after the Amíns' measurements and when the details would be under execution by the pupils, the several villages would be going through the process of testing with the filling up of topographical details by some of the Surveyors or Amíns. The supervision would be more efficient than that now exercised over the Karanams.

The other objection raised by the Board is a doubt whether the pupils could keep up with the Amins, and this may be at once removed by regulating the number of the former with reference to their progress.

7. In considering the extent of detail which is likely to be thrown on the Survey Department by the proposed plan, it is to be remembered that the private fields in the surveyed Táluqs of South Arcot and in some parts of Trichinopoly, and the comparatively small size of fields in the Northern Deltas, are no guide as to what is the case in such Districts as Nellore and parts of Guntoor as well as Salem, where the fields are very much larger.

8. The Government in their review of the original scheme recorded their opinion "that if "the great expense did not render such an under- "taking impracticable, every field should be "measured in the professional Survey." The course recommended is the nearest approach to this, as every field will be measured by the professional Survey Department, the only relaxation being that the minute details below 10 acres will not be plotted but sketched into the maps with sufficient accuracy for all revenue purposes, while as I have endeavored to show, the measurements will be more efficiently and accurately made than if left to the Karanams.

Paragraph 13, *Extract Minutes Consultation*, *15th February* 1858, *No.* 191.

9. If the course I have recommended and now further explained should not be adopted, I have further to submit the expediency under the circumstances explained above in paragraph 2 of at once placing the Karanams' measurements in the two and four acre blocks under the Superintendent of Revenue Survey, in accordance with the Resolution of Government in paragraph 26 of Extract Minutes Consultation, 25th January 1858, No. 96, in which "the Government entirely "agree with the Board that this portion of the work must be controlled by the Superintendent of "Revenue Survey equally with the professional Survey of the standard fields."

10. The example of the Trichinopoly party alluded to in paragraph 9 must be qualified by the circumstances described in paragraph 5 of my letter of the plotting and mapping not being brought up, and in this respect the relief in details will be greatly felt under the proposed plan.

11. In reference to paragraph 10, I beg to observe that it is not easy to state clearly the exact gain of time in the proposed alteration, Captain Priestley has estimated it as equivalent to 10 Rupees a square mile, and it is evident that if plotting is confined to tolerably regular blocks averaging about 10 acres instead of two and four in many cases the saving of labor and time must be something considerable. This is admitted by the Board in paragraph 3.

12. The Board urge in paragraph 11 the necessity of strengthening the Survey parties. This has already been done to the utmost. It is not intended to give up any part of the work already done as supposed by the Board. The only difference being that details within 10 acre blocks would be sketched into the maps instead of being plotted down to two or four acres where the fields are not above that size.

13. I would beg that the proposal may be considered in its integrity as including the measurements of details of Survey blocks and as professing upon the whole, to increase the expedition and efficiency of the Survey, and I may add that it accords generally with the course adopted in the Bombay Survey as regards the Survey blocks, which were there often even much larger than now proposed, and also, if I have been rightly informed by an Officer in that Survey, with the course eventually adopted for filling in the details.

14. As the matter is now before the Government, I have forwarded a copy of this letter to the Secretary in the Revenue Department, with the request that it may come under consideration along with any additional remarks which the Board may see fit to offer on it.

(True Copy)

(Signed) H. NEWILL,
Director of Revenue Settlement.

No. 251. ORDER THEREON, 15th September 1860, No. 1,607.

1. These papers relate to a plan proposed by the Director of Revenue Settlement with the view of expediting the Survey operations. This plan is explained and discussed by the Board of Revenue in their Proceedings of July 14th above recorded, and the accompaniment thereof, being a letter from the Director of Revenue Settlement. The plan is that the Survey

Department shall measure no smaller areas than 10 or 12 acres, to be enlarged to 20 acres when so much land is met with together, of tolerably uniform quality. The detail field measurements within such areas to be made by paid pupils of the Survey Department, under the orders of the Survey Amins. The Survey field maps to show only the large areas or blocks; but the subordinate fields to be roughly sketched in by the agents employed on the detailed Survey.

2. Mr. Newill speaks of the plan as approved by the Superintendent of Survey, and he sends up a memorandum from Captain Priestley in which it is sketched out. But the Government learn from the correspondence which passed on the subject, and which was obtained from the Survey Superintendent, during Mr. Newill's absence from Madras, that the former Officer proposed the plan in question only as being preferable to another scheme which had been proposed by Mr. Newill, viz., that of confining the regular Survey to still larger areas. The very letter* from Captain Priestley which transmitted the memorandum above referred to contained such an opinion. The letter was not sent up by Mr. Newill though the memorandum appended to it was so.

* *Dated 19th June* 1860.

3. Captain Priestley's opinion appears in fact to be that no change is required; that as soon as the Survey parties have had time to become fully trained, they will perform their full work and keep up with the demarcation, as the Trichinopoly party is actually doing. He considers that the present proposal would greatly lessen the utility of the Survey, and thinks its adoption inexpedient; and he deprecates constant change and threat of change as extremely detrimental to his Department.

4. The Board also dissent from the proposal. They admit that, if the boundaries of the Survey blocks agree with those of fields, and if certain other conditions are fulfilled, the plan would answer all *revenue* purposes. But they argue (paragraph 8) that it will greatly lessen the value of the Survey to the raiyats; they express want of confidence in the agency to be employed; and they state their opinion that if they rightly understand the scheme, it will injure the Survey as to permanency and comprehensiveness. They notice also (paragraph 9) that in Trichinopoly the Survey Department is quite up with the demarcation; and they express the opinion (paragraph 11) that in the Godavery, where the Survey is most in arrear, a preferable plan to that now proposed would be to strengthen the Survey parties.

5. The second paper recorded at the head of these proceedings is a letter from Mr. Newill enclosing copy of one addressed to the Board in answer to their objections. His main ground is that the work up to 10 or 12 acres will be as well done by the Survey pupils, as up to the smaller extent of two and four acres (now allowed) by the Karanams. He argues (paragraph 4) that the Board's opinion as to the incompetency of the Karanams applies to the existing plan of employing them to measure the details of the two and four acre Survey fields; and (paragraphs 5 and 6) that the details of the large Survey fields now proposed would be done as well by the "pupils" as the smaller ones are now by the Karanams. In reply to the Board's remark that they would prefer that the Survey parties in the Godavery District should be strengthened, he says that this has already been done to the utmost.

6. The Government have carefully considered the subject, but they are not prepared to adopt Mr. Newill's suggestion. It is quite true that hitherto the Survey has in most of the parties fallen much behind the demarcation; but this is because the parties were new and the Survey work takes longer training than the other. In Trichinopoly, as already noticed, the Survey is now working fully up to the demarcation, and it may be expected to do so shortly in the Krishna. Mr. Newill urges, in reply to the Board, that the Survey parties have already been made as strong as they can be without being unmanageable. But this is a mistake; it is true the strength of the parties has been ordered to be raised, but they have not actually been so strengthened for want of trained hands.

7. The Government agree with the Board of Revenue in doubting the efficiency of the agency proposed to be made use of. In terms the proposition is to employ "Survey pupils;"

but practically it is to be supposed that the agency would consist simply of persons poorly paid in comparison with the regular Survey, and who through want of skill or from any other defect, could not gain admission into that establishment. The Governor in Council also fails to see the necessity at the present time of such a change as that proposed. They see force in Captain Priestley's arguments as to the progressive improvement of his Department.

8. The Director will be instructed for the future, when making any proposition to Government connected with the Survey Department, to lay before Government all the corespondence that may have passed on the subject between himself and the Superintendent of Survey. This is the invariable practice in other Departments, and it is necessary to prevent mistake. Mr. Newill's attention will also be called to the Order of Government in the Public Department of 21st May* 1859, No. 801, on the subject of correspondence, and especially to paragraphs 4 and 5.

* *Communicated to the Director of Revenue Settlement with Order, dated 27th May 1859, No. 711.*

9. Another proposal is touched on in paragraphs 12 and 13 of the Board's Proceedings, viz., that the Revenue Settlement should be made on the uncorrected measurements of the Amíns. The Government consider that the Board are right in objecting to this plan, except only as a temporary and exceptional arrangement. When the Survey is brought up to full work, the occasion for any such proceeding will entirely cease.

(Signed) J. D. BOURDILLON,
Secretary to Government.

IN CON., 25TH JUNE 1860, A. after No. 3,073.

From H. NEWILL, Esq., Director of Revenue Settlement,
dated Madras, 22nd June 1860, No. 647.

In my Annual Report on the settlement operations for the past year, submitted on 23rd April last, it is shown that the demarcation and classification of the Godavery district will be completed in a few months hence, and that these operations would be finished in the late Masulipatam district at a still earlier date. I therein proposed that the Godavery party should be transferred to Nellore, which the Government decided to be "one of the districts which most "urgently needs survey and which should receive the earliest "attention;" and that the Krishna party should extend its operations on the Guntoor side of the enlarged Krishna district. I further proposed that, in order to prevent the demarcation and classification in these new fields of work, running a-head of the detail measurements upon which the proposals for settlement must be based, the field measurements, as an experiment, should be undertaken by the Settlement Department in connection with the demarcation and classification. I have now the honor to report more fully on the means that should be adopted for expediting the Survey in these northern districts.

Paragraph 32.

Paragraph 60.

Extract Minutes of Consultation, 15th August 1855, paragraph 25.

2. While suggesting the above experiment of the transfer of the whole of the field measurements to the Settlement Department, I expressed my reluctance to such a radical departure from the original scheme, depriving as it would the professional Survey of its *revenue* character, and converting it into a general topographical Survey with the outlines of villages and their sub-divisions as a general check upon the revenue details. It also involves the question of the expediency of keeping up a professional Survey Department at a large expense for the limited purposes above described, and also of wholly reconstituting the Survey branch on a footing sufficient only for revenue purposes, and placing the Survey under the same superintendence as the Settlement, as in the Bombay Presidency, not only in respect to the measurement of fields, but in all other parts of the Survey operations.

3. The great necessity for the rapid introduction of the Revenue Settlement in the Godavery and Krishna Deltas in order that the Government may realize due returns from the irrigation works, which I have in my paper, dated 12th September 1859, estimated at 8 or 10 lacs of Rupees annual *increase* over and above the present revenue, would have warranted any plan, by which time could be gained in making the settlement of the revenue on a sufficiently accurate basis, and could I have foreseen that so little would have been supplied by the Survey Department in the way of detail areas* of fields in its initiatory stage in that locality, I should not have hesitated to have proposed a less perfect plan such as that above alluded to; but now nearly the whole of both the Godavery and Krishna districts has been demarcated for Survey, and the question to be considered is, how the Survey can be best brought up in these localities, and how it may generally be expedited.

* Up to close of 1859.

	Villages.
In Masulipatam.. ..	43
In Godavery...	37

4. The details of the above plan have been worked out, but, as I do not advocate such a revolution, if the object in view can be gained by any process that will not be subversive of the present system, it will be sufficient to notice here that the professional Survey operations could be conducted at a cost, as estimated by the Superintendent of Revenue Survey, of about Rupees 29 a square mile, the difference between this and the standard of Rupees 65 a square mile being thus available for a measuring establishment to be attached to the Settlement Department. The village maps would be based upon the accurate outline of the sub-divisions of about 200 acres, the detail being sketched in, instead of plotted with minuteness as at present.

5. A good argument for continuing the Survey Department on its present footing is, that the Trichinopoly party has attained a fair rate of work, and, as estimated by Captain Priestley, measured about 1,040 square miles, of which 921 is in the detail of fields, in the past official year,

at a cost of about 56¾ Rupees a square mile, which is within the standard rate, though it would not appear that the whole operations of plotting and mapping have been completed for that area.

6. Confining now consideration as to how the Survey may be best expedited on its present basis, the question arises as to where the delay and difficulty occur in the out-turn of its work. This is traced to the plotting, for while 407 square miles have been measured in the Godavery district up to the end of the past year, the areas for only 37 villages were handed over to the Settlement Department. The rapidity of plotting depends upon the size and shape of the fields, and it is obvious that if the size of survey fields can be increased in tolerably regular forms, the labor of plotting and of the calculations of their areas, as the general basis of the assessment, will be considerably reduced.

Vide his Memorandum appended.

7. The point has been fully considered with the Superintendent of Revenue Survey, and in communication with the local officers of both departments, and the conclusion arrived at, is that if the survey fields are increased to about 10 or 12 acres, the present system will be preserved in its more important principles, and that the details* within that limit may be safely left to a somewhat less accurate process. As regards classification of soils, I must make the proviso that fields consisting of soils with marked dissimilarity shall not be clubbed together into survey fields, while on the other hand where the soils run evenly over a large extent, the size of survey fields may be increased to 20 acres, the maximum now allowed for survey without sub-division. The experience gained in the classification in the districts now in hand, shows that this rule may safely be adopted.

* These will be sketched into the maps without being plotted.

8. The enlarging the survey fields will be advantageous to the Settlement Department also in some measure, as I do not propose to mark permanently the holdings within them.

9. The enlargement of the survey fields creates the necessity of further agency for the measurement of the holdings within the same, for almost the whole of these will have to be measured in detail, and the question is—first, as to the nature of the agency to be employed, and secondly, as to the department to which it should be subordinated.

Dated 25th March 1859, No. 273, paragraph 60.

10. In my Annual Report for 1858, I said I was not prepared to enlarge the minimum size of survey fields to 10 acres, and to have the measurement of the details made by the Curnums, without considering the subject in the aspect of undertaking the general details of the measurement of the whole country, and without some provision for the expenditure required for the purpose. In more recent conferences with the Superintendent of Revenue Survey, he has allowed that the enlargement of the survey fields as above described will so far facilitate and expedite his work; that about 10 Rupees per square mile may be allowed out of the Survey expenditure for measuring the details within the survey fields.

11. If Curnums are employed in the detail measurements they should be paid a fair allowance, and considering that they can only proceed much more slowly than the regular Survey establishment, and that the Survey Aumeens get 6¼ Rupees a square mile for the area measured, besides Rupees 10 to Rupees 14 a month as fixed salaries, a moiety of the Rupees 10 a square mile would not be too much to give to the Curnums, the remainder being employed for the supervision of their work.

12. But the question is, whether the Curnums are the best agency. It is doubtless advantageous that they should be acquainted with the details of the survey of their villages, and their measurement of them would conduce to this, but the growing experience of this department is, that their services cannot be regularly commanded for the purpose, that in many cases they are unfitted for the duty from age or want of intelligence, and that upon the whole it is better to employ a separate agency whose trained services can be generally applied where required without being limited, as in the case of the Curnums, to a single village. The Curnums too are an interested party, holding as they do in almost every case either Inam or Government land in their villages, and they would thus be exposed to a temptation to fraud and irregularity in the measurements, which would not exist in the case of a separate agency without such direct self-interest.

13. As the Survey Department has its numerous Officers, Surveyors and Aumeens scattered over the field of work, it seems to me that, considering the vast relief afforded to it, both in the measurement of survey fields and in plotting them by increasing the minimum size to ten acres, it might attach a "volunteer" or rather a pupil, on a small allowance to each Survey Aumeen; and thus obtain all the details under good supervision at as low a cost as that of getting them done by the Curnums, and certainly with more regularity and accuracy as the pupils would be trained men, and exclusively under the orders of the Survey Department.

14. In my opinion this is the most perfect plan, as the Survey Department will under it be responsible for the areas from first to last, and as far as can be seen at present, the work will be accomplished with as much rapidity and economy as under any other arrangement short of the subversion of the present system. It is also incongruous for the Survey Department to have the supervision of the measurement of fields from 10 to 20 acres and for the Settlement Department to measure almost the whole of the country again in detail.

15. Even if the Curnum's agency were employed, I would recommend that it should be placed under the superintendence of the Survey Department, and that the responsibility of the accuracy of the details in the enlarged survey fields should rest with that department.

16. The conclusions I have thus arrived at seem to be in accordance with the views of Government expressed in their Order of 23rd November 1859, in which the question is discussed, and where they are willing to enlarge the size of survey fields, but not prepared to employ the agency of the Curnums in a way that would to any extent compromise the accuracy and trustworthiness of the Survey. Under these circumstances any immediate arrangements required to be made will be in accordance with the proposal now stated, but it is very desirable that the early Orders of Government should be obtained on the subject, as the work will be almost immediately commenced in a new district and it is advantageous that it should set out without any uncertainty as to the mode of procedure.

Paragraphs 5 and 6.

17. As regards the work already laid out for Survey or measured by the Survey Department, I propose that the same principle should be adopted as far as practicable, viz., that instead of plotting every small field measured, several should be taken together within the prescribed limit, the details being sketched in, and that in measuring fields already demarcated, the survey Aumeens should constitute them into survey fields of the requisite dimensions for the basis of calculation, the details being filled in in the manner proposed.

18. Another way in which the Settlement may be expedited by Survey arrangements, is to adopt generally the expedient, as explained in paragraph 31 of my last Annual Report, of taking the field areas as calculated from the field books, without waiting for their correction in the Survey office by plotting or examination. This does not affect the eventual out-turn of survey work in a complete form, but supplies a basis, though not a strictly accurate one, for the preparation of the settlement accounts at a much earlier period; it is intended that all errors above five per cent. afterwards found should be corrected in the accounts, and those under that limit be neglected as not sufficient to vitiate the settlement. It would of course be more satisfactory if the accurate areas could be supplied in time, in order that the revenue accounts might in all cases exactly tally with the Survey accounts as eventually corrected, but if experience shows that the corrections and differences are not numerous, the plan may be allowed. At present it will form an experiment.

To Government, dated 21st June 1860, No. 643. Copy sent to Board.

19. I have already in a separate communication submitted for sanction the transfer of the auxiliary Survey party in the Godavery district to Nellore, and for its being made up gradually to the strength of a regular party.

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ENC. 1.

MEMORANDUM.

It is proposed that the following modification of the Rules at present existing shall be made with a view to expediting the preparation of Survey records and retaining at the same time the original principle of action :—

1st. Fields to be demarcated in blocks averaging ten acres under the same rules as at present in force for demarcation. The above fields to be measured and plotted by the Survey.

2nd. The experiment of handing over the areas of fields as worked by the Survey Aumeens having been found to answer in the south, the same system to be adopted in the north, viz., each Aumeen at the close of his day's work calculates and inserts the content of each field in his field book. These areas are thus ready for the use of the Settlement Department immediately after the completion of the measurement.

3rd. Two plans for the measurement of the interior sub-divisions of survey fields present themselves and each has certain advantages to recommend it—

I. To hand the detailed measurement entirely over to the Curnums as originally intended when the minimum of survey fields was one acre in irrigated and two acres in unirrigated land. In consideration, however, of a larger portion of detail being thus given to them to execute an allowance of Rupees 10 per square mile to be set apart from the Survey funds for their remuneration and for covering all other expenses connected with the sub-divisions of fields.

II. To entrust the detailed field measurement to the volunteers of the Survey establishment, who would perform their work in the same manner as was done with regard to puttahs formerly.

4th. The organization in the (former) Guntur or Nellore district of another Survey party in lieu of the extra one sanctioned for the Godavery district.

MADRAS,
19th June 1860.

(Signed) F. J. B. PRIESTLEY, CAPTAIN,
Superintendent of Revenue Survey.

(True Copy.)

(Signed) H. NEWILL,
Director of Revenue Settlement.

Exd. J. Tulloch.

Memo on Rev: Nos 1477 & 1624.

These papers relate to a plan proposed by Mr Newill with the view of expediting the survey operations. This plan is explained and discussed by the Board's Proceedings of July 11th and the enclosure. It is that the survey Departt shall measure no smaller areas than ten or twelve acres, to be enlarged to twenty acres when so much land is met with together, of tolerably uniform quality. The detail field measurements within such areas to be made by paid pupils of the Survey Deptt, under the orders of the Survey Amins: in other words by an inferior and worse paid agency than the regular survey. The accurate maps would show only the large areas or blocks: the fields would be roughly sketched by the Agents employed on the detailed survey.

2. Mr Newill speaks of the plan as approved by the Supt of Survey, and he sends up a memo from Captain Priestley containing but I understand from Captain Priestley that he only assented to it as being preferable to another plan proposed

by Mr. Newill, viz that of confining the regular survey to still larger areas; and the very letter which transmitted the memo just referred to (of which I circulate a copy obtained from Capt.n Priestley) contained such an opinion. This letter was not sent up by Mr. Newill. Captain Priestley thinks that no change is required, that as soon as the survey parties have had time to become fully trained they will perform their full work, and keep up with the demarcation, as the Trichinopoly party is actually doing. He considers that the present proposal would greatly lessen the utility of the survey, and considers its adoption to be inexpedient; and he deprecates constant change and threat of change as extremely detrimental to his Department.

See letter of June 19.

3. The Board also condemn the proposal. They admit that if the boundaries of the survey blocks agree with those of fields and if certain

Paras 8

certain other conditions are fulfilled, the plan would answer all revenue purposes. But they argue that it will greatly lessen the value of the survey to the ryots. They express want of confidence in the agency to be employed; and they state their opinion that if they rightly understand the scheme, it will injure the survey as to permanency and comprehensiveness. They notice also (Para 9) that in Trichinopoly the survey Dept.t is quite up with the demarcation; and they express the opinion (Para 11) that in the Godavery, where the survey is most in arrear, a preferable plan to that now proposed would be to strengthen the survey.

† From Mr. Newill Aug 4.

4. The other paper† is a letter enclosing copy one addressed from Mr. Newill to the Board in answer to their objections. His main ground is that the work up to 10 or 12 acres will be as well done by the survey pupils, as up to the smaller extent of 2 & 4 acres (now

allowed) by the Karanams. He argues (Para 4) that the Board's opinion as to the incompetency of the Karanams applies to the existing plan of employing them to measure the details of the 2 acre and 4 acre survey fields: and (Para 5 & 6) that the details of the larger survey fields now proposed would be done as well by the "Amins" as the smaller ones are now by the Karanams. In reply to the Board's remark that they would prefer that the survey parties in the Godavery District should be strengthened, he says that this has already been done to the utmost.

5- It appears to me that the Board of Revenue and Capt^n Priestley have the best of the argument. It is quite true that hitherto the survey has in most of the parties fallen much behind the demarcation; but this is because the parties were new and the survey takes longer training than the other. In Trichinopoly as already said the survey is now working fully up to the demarcation, and it may be expected to do so shortly in the Krishna. Mr. Newill urges in reply to the Board that the survey parties have already been made as strong as they can be without being unmanageable; but they have been so on paper only, the parties have not been completed up to the full allowed strength, for want of trained chainmen. I think the Director has not treated the Gov^t fairly in sending up this proposal as approved by the survey Sup^ts, but without that officer's letters. Thus in fact a wrong impression was conveyed, for Capt^n Priestley

assent was only conditional. Mr
Savill should send up all the
correspondence on subjects submitted
by him, as is done by other depart[s],
and should state fully the opinion
of the Survey Superintendent on ques-
tions affecting that Department.
7. Another proposal is touched on
in Paras 12 and 13 of the Board's
Proceedings viz that the settlement
should be made on the uncor-
rected measurements of the
mines I think the Board are
right in objecting to this except
only as a temporary and except-
tional arrangement. When the
survey is brought up to full work
the occasion for any such compa
rison will entirely cease.

I should not as desire
to see Revision key
festion - I have
assumed as the
Board desire, to
check & ensure,
a measurement
claim to depress
if any of its
value - would as-
suredly be to
commit a
serious mistake
as provided only
Cabot - Priestly a
distinguishing
feature of the
Aug. 27 Mandara Rev. Dist.
has been the
correct measure
ment and ac
curate delineation

of fields - we have in the
Register Schedule observed
should these prove on survey
be substantiated
the remarks on Para 6 of
this memo - should be com-
municated to Settlement

23 Aug

Ellis

4

Memo.

On Mr Newill's proposal for expediting survey operations

Draft amended

August 1860

Revr Dept.

No 1607

Proceedings of the Madras Government.

Under date the 15 September 1860

Read the following papers.

Proceedings of the Board of Revenue

Submitting with the Board's observations a letter from the Director of Revenue Settlement forwarding for consideration certain modifications suggested by the Superintendent of the Survey with the object of expediting the Survey.

From the Director of Revenue Settlement.

Forwarding copy of a letter to the Board of Revenue offering explanatory remarks on their Proceedings ~~of the Board of Revenue~~ Reviewing the proposal to increase the size of survey fields to 10 acre blocks for the purpose of expediting the survey.

(Here enter 14th July 1860 No 3240)

(Here enter 4th Augt 1860 No 7503)

1. These papers relate to a plan proposed by the Director of Revenue Settlement with the view of expediting the survey operations. This plan is explained and discussed by the Board

OS

Revenue in their Proceed-
-ings of July 4th [illegible] above recorded, and the
The plan is that the
Survey Department shall
measure no smaller areas
than ten or twelve acres, to be
enlarged to twenty acres when
so much land is met with
together, of tolerably uniform
quality. The detail field
measurements within
such areas to be made by
paid pupils of the Survey
Department, under the
orders of the Survey Amins.
~~in other words by an in-~~
~~-ferior and more food~~
~~agency than the regular~~
~~survey~~. The survey field maps
to shew only the
large areas or blocks, but the subordinate
fields to be roughly
sketched in by the Agents
employed on the detailed
survey.

accompaniment thereof, being a letter from the Director of Revenue Settlement.

Mr.

2. Mr. Newill speaks
of the plan as approved
by the Superintendent of
Survey, and he sends up
a Memo from Captain
Priestley ~~embodying the~~
~~plan~~. But the Govern-
-ment learn from
the correspondence, which passed
subject which was obtained
from ~~Capt Priestley~~ the Supt. Survey that
~~that~~ officer proposed the
plan in question only as
being preferable to another
~~scheme which had been~~
proposed by Mr. Newill,
viz. that of confining the
regular survey to still
larger areas. ~~and~~ The very
letter from Capt Priestley which transmitted
the Memo above referred to con-
-tained such an opinion.
The letter was not sent
up by Mr. Newill though
the Memo appended to it
~~Priestley thinks that no~~
was so.
change is required, that as

soon

this which it is
selected out.

during Mr. Newill's absence
from Madras, that the former

+ dated 19th June 1860.

I Capt Priestley's opinion
appears in fact to
be that no

soon as the survey parties have had time to become fully trained, they will perform their full work, and keep up with the demarcation, as the Trichinopoly party is actually doing. He considers that the present proposal would greatly lessen the utility of the survey, and thinks its adoption to be inexpedient; and he deprecates constant change and threat of change as extremely detrimental to his Department.

4. The Board also dissent from the proposal. They admit that, if the boundaries of the survey blocks agree with those of fields, and if certain other conditions are fulfilled, the plan would answer

answer all revenue purposes. But they argue (Para 8) that it will greatly lessen the value of the survey to the ryots; they express want of confidence in the agency to be employed; and they state their opinion that if they rightly understand the scheme, it will injure the survey as to permanency and comprehensiveness. They notice also (Para 9) that in Trichinopoly the survey Department is quite up with the demarcation; and they express the opinion (Para 11) that in the Godavery, where the survey is most in arrear, a preferable plan to that now proposed would be to strengthen the survey parties.

5. The second paper recorded

recorded at the head of these proceedings is a letter from Mr Nevill enclosing copy of one addressed to the Board in answer to their objec-tions. His main ground is that the work up to 10 or 12 acres will be as well done by the survey pupils, as up to the small-er extent of two and four acres (now allowed) by the Karanams. He argues (Para 4) that the Board's opinion as to the incom-petency of the Karanams applies to the existing plan of employing them to measure the details of the two and four acre sur-vey fields; and (Paras 5 and 6) that the details of the larger survey fields now proposed

waved

would be done as well by the "pupils" as the smaller ones are now by the Karanams. In reply to the Board's remark that they would prefer that the survey parties in the Godavery District should be strengthened, he says that this has already been done to the utmost

6. The Government have carefully considered the sub-ject, but they are not pre-pared to adopt Mr Nevill's suggestion. It is quite true that hitherto the survey has in most of the parties fallen much behind the demarcation; but this is because the parties were new and the survey work takes longer training than the other. In Tri-chinopoly, as already no-ticed, the survey is now working fully up to the

demarcation

demarcations, and it may be expected to do so shortly in the Kistna. Mr Neville urges, in reply to the Board, that the survey parties have already been made as strong as they can be without being unmanageable. But this is a mistake; it is true the strength of the parties has been ordered to be raised, but they have not actually been so strengthened for want of trained hands.

7. The Government agree with the Board of Revenue in doubting the efficiency of the agency proposed to be made use of. In terms the proposition is to employ "survey pupils"; but practically it is to be supposed that the agency would consist simply of persons poorly paid

paid in comparison with the regular survey, and who through want of skill or from any other defect, could not gain admission into that Establ.

The Governor in Council also fails to see the necessity at the present time of such a change as that proposed. They see force in Capt. Priestley's arguments as to the progressive improvement of his Department.

8. The Director will be instructed for the future, when making any proposition to Government connected with the Survey Department, to lay before Government all the correspondence that may have passed on the subject between himself and the

the Superintendent of Survey. This is the invariable practice in other Departments, and it is necessary to prevent mistake. I trust, Sir, will attention will also be called to the Order in the Revenue Dept of 21st May 1859 No 801, on the subject of correspondence, and especially to Paras 4 and 5.

9. Another proposal is touched on in Paras 12 and 13 of the Board's Proceedings, viz that the Revenue Settlement should be made on the uncorrected measurements of the Amins. The Government consider that the Board are right in objecting to this plan, except only as a temporary and exceptional arrangement. When the survey is brought up to full work, the occasion for any such proceeding will entirely cease.

× Communicated to the Dr of Rev. Settt with order of 27th May 59 No 470.

12 Copies Board of Revenue. Dispt 17
13 " Director of Rev: Settlement. "
4 " Supt. of Rev: Survey "

Mr Neville's proposal for
expediting survey operations

Revenue 1860 Department

Pro: of Govt for September

No 1607.

Proceedings of the Madras
Government.

Dy 15th September 1860.

On a plan proposed by
the Dir of Revenue Settlement
with the view of expediting
the Survey operations -

No 24 at 287.