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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Revenue DEPARTMENT

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GOVERNMENT OF MADRAS.
REVENUE DEPARTMENT.

20th May 1880, No. 564.

READ THE FOLLOWING PAPERS :—

No. 123. Proceedings of the Board of Revenue, dated 21st May 1879, No. 1,370.

ABSTRACT.—Submitting to Government report from Special Sub-Collector for Irrigation on the Madras Irrigation Company's Canal in Cuddapah and Kurnool Districts, and stating Board's views as regards the necessity for legislation urged by that officer and the permanent appointment of a responsible officer to be in special charge of Irrigation.

No. 129. Proceedings of the Board of Revenue, dated 6th June 1879, No. 1,569.

ABSTRACT.—Submitting to Government draft of amended Canal Rules furnished by Mr. A. L. Lister.

No. 130. ORDER THEREON, 20th May 1880, No. 564.

Irrigation, No. 4.

THE proposals which Mr. Lister makes in the above papers involve a radical change of system of an experimental nature and of somewhat doubtful financial effect.

2. In the present position of affairs between the Secretary of State and the Irrigation and Canal Company, it is impracticable to introduce any material change in the existing system of utilizing the Company's works and realizing their dues, and the further consideration of the subject must be postponed.

(True Extract.)

(Signed) C. G. MASTER,
Secretary to Government.

To the Board of Revenue, with eleven enclosures.
„ the Public Works Department.

Exd. W. H. French.

65 Copies.

advised upon: a letter to the

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No. 1,370.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 21st May 1879.

Read the following letters :—

From C. S. CROLE, Esq., Acting Collector of Kurnool, to C. A. GALTON, Esq., Acting Secretary to the Board of Revenue, dated Peapally, 7th September 1878, No. 351 :—

I HAVE the honor to forward a very lengthy report on the present position of the Madras Irrigation Company's Canal by the Special Sub-Collector for Irrigation.

2. He assumes at the outset that the canal is a failure. This and the fact that, although the canal has been open fifteen years, the Company is practically insolvent are too painfully evident. Mr. Lister's remedies for this state of things consist in various improvements of administrative detail, in view to adapting the canal, as he says, to the wants of the people. But it seems clear that such a mode of treatment, however suitable to effect improvement or remove superficial defects, and which Mr. Lister himself justly describes as neither brilliant nor heroic, is quite out of place when dealing with a state of affairs such as this Company exhibits. It can never convert total failure into complete success. Superficial reform must necessarily be inert in the treatment of radical unsoundness.

3. I may briefly say that I concur in most of Mr. Lister's proposals, which are good as far as they go. I specially notice the appointment of a permanent Sub-Collector with head-quarters at Nandial (paragraph 41); the proposal to make it obligatory on the Chief Engineer and Manager to address the Collector before carrying any matter to Government (paragraphs 46 and 47); the abolition of applications

for water, a proposal which, by the way, has already been made by myself* (paragraphs 70 to 85); the one acre minimum, with $\frac{1}{4}$ acre increments, for sub-divisions of fields (paragraphs 86 to 93); the proposal regarding the revision of Rules IV, V, and VI (paragraphs 102, 114, and 118); and the recommendation that village officers should not be in any way subordinated to the officers of the Company, and should not have to attend them to make measurements of crops, which, if they wish to make, they should do themselves, or apply to the Sub-Collector (paragraphs 111 to 113).

4. This last point has a direct bearing on the strict observance of the contract, under which the Government engaged to purchase the water from the Company. I am aware that the Chief Engineer was permitted to supersede this provision by the rule making applications in writing for water to the Company's officers, with whom was afterwards joined the Village Curnam, an indispensable preliminary to legitimate irrigation. But this plan was conceived in defiance or ignorance of native habits, and as it has failed miserably, and entailed a very large amount of unnecessary trouble and many complications, besides injuriously affecting the guarantee payable by Government, the permission should be peremptorily withdrawn. Government—and Government alone—will then be left to deal with the Company, to purchase and to pay for what water is utilised by its ryots. The position thus occupied, resting as it does on the terms of the contract with the Company, will be a strong one, and is as simple as it is intelligible. The present relations can be described by none of these terms.

5. In the above and several minor details I concur with Mr. Lister, but there are certain points in his report to which it is impossible to assent. Among these, the first is his wholesale condemnation of the Revenue administration of this district. In reference to this matter he has gone into detailed cases of error, ignorance, or irregularity on the part of certain officers of the district. Not one single complaint of this sort has ever been made by Mr. Lister till now, and I apprehend that a general report was hardly the place to spring on the Collector of the district a sweeping charge against its administration. If Mr. Lister found defects and shortcomings, the experience is not one unknown elsewhere. Two courses were open to him, either to redress them himself by punishing offenders and otherwise, or, in cases with which he felt himself incompetent to deal, to bring the matters to my notice as they arose.

Kurnool

Gob. of (1880) Madras.

REVENUE.

To

THE BOARD OF REVENUE,

Ac., Ac., Ac.

Dated May 20th.

Printed 27th.

Recd.

C.O. 20th May 1879, No. 504.

M.A.Y.

Nos. 128-130.

General Rules.—Directions for certain reasons in reference to Revenue Board's Proceedings submitted by Mr. A. L. Lister, that the further consideration of the subject be postponed.

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I have been too short a time in charge of the district to be connected either with good or with bad management, both of which take a considerable time to bring about. The experience I have gained, however, leads me unhesitatingly to say that there is no such startling difference between the village and taluk Revenue staff here and elsewhere as Mr. Lister's unbounded strictures would seem to imply. The assertion, for instance, that Carnams are usually ignorant of the kistbundi of the district is simply incredible, and I feel certain that if the Special Sub-Collector intended higher authority to infer that the Revenue staff in Kurnool is, by comparison with the average of other districts, exceptionally bad, the condemnation will not stand the test of facts. It would be quite easy in either of the last two districts in which I have served, Chingleput and Nellore, to find instances of mismanagement and ignorance quite as glaring as any of those quoted against Kurnool. I do not believe that, even allowing for the strain imposed by the famine operations on the village and taluk establishments, this cause has had any appreciable effect on the fortunes of the Company.

6. In paragraphs 198 to 204 Mr. Lister seeks to prove that a legislative enactment is necessary for the due management of the canal. With reference to this, it is merely necessary to remark that he has not made out his case of absolute necessity, without which any addition to the Statute Book is much to be deprecated in regulating the relations of the Madras ryot with the Government. Legal forms, pains, and penalties are inelastic and irritating, and are foreign to the genius of the Madras ryot, whose experience of the instalments of legislation already given to him has not been such as to decrease his dislike of such measures.

7. Little less than one-fourth of Mr. Lister's report is devoted to showing, directly or indirectly, that the Rupees 6 an acre water-rate should not be lowered. His line of argument is not altogether devoid of obscurity or free from contradictions, but, as far as I understand him, he thinks the present water-rate to be fair and equitable on the ground mainly that it is not prohibitive, although he admits that it just touches the line, and he would not have any change at present.

8. The arguments adduced by the Special Sub-Collector may be left to speak for themselves. I merely venture the following remarks. The Madras Irrigation Canal is a commercial undertaking with water for sale. Its fate depends on the amount it can dispose of; and, since it offers the commodity in a tract of country in which it has not hitherto been used for irrigation, the rate should be attractive. Moreover, the charge levied by Government for the same article cannot well be exceeded without a check being given to the Company's operations. Now, what does the Special Sub-Collector admit? Nothing more nor less than that when, under the progressive rates (cowles), the charge reaches Rupees 5, the land is mostly thrown out of irrigation, and is brought under dry cultivation again.

9. It is a fact that in the commanded villages of Ramallakota, Nandikotkur, Nandial, and Sirvail, the taluks almost solely affected by the canal, the average charge for first-class irrigation under the canal is Rupees 2 per acre more than the Government charge for lands of similar quality. This makes a difference of 32 per cent., or adding second-crop charge of no less than 39 per cent. Mr. Lister apparently thinks such a difference slight. No farmer either in this country or at home would agree with him.

10. In second-class irrigation again the difference is Rupees 4 to Rupees 2, or 50 per cent. in favor of the Government rates.

11. Mr. Lister urges that it would be hard upon the Company to ask them to reduce their rates, and instances the loss which followed the reduction in 1874. He forgets, apparently, that the year in question was marked by an abundant rainfall, which would have caused a decrease of irrigation under any scale of rates. It is also quite patent that some immediate sacrifice must be accepted when steps have to be retraced. A temporary loss is a small price to pay for the opportunity of retrieving a mistake. That such a mistake has been made cannot be seriously denied, when the best apology that can be made for rates, which are admittedly not attractive, and which are very much, and not merely a trifle, higher than Government rates, is only that they stop short of being prohibitive. This surely is not the way of securing a heavy demand and a large sale for the Company's wares. As well might it be said in

defence of the system prevailing in the wretched rack-rented zemindaries of this Presidency that the rent exacted is fair, because those estates are not left waste and deserted. The ryot must live. He is a long-suffering being, and if the Circular increases taxation, he lives on less than he did before. That is the sole difference to him, but the country is the poorer also.

12. In the case of the canal the bulk of the ryots, finding no inducement to take canal water, do not take it; and this is just where the mistake of a so-called fair and equitable rate, stopping short of being prohibitive, tells on the returns of the Company. When there are no attractions to do so it is not in reason to be expected that the ryot will forsake the traditions of his forefathers, convert his stock, change his modes of cultivation, transform his land, import labor, and go to great inconvenience and expense, merely to pour money into the coffers of a Company whose officers seize the slightest pretext of irregularity in his mode of taking water to throw him into jail.

13. In connection with this subject I observe that Mr. Lister states that he has varied the settlement made in Fasli 1287 by Ramachendra Row, Irrigation Deputy Collector, on the ground of its inequality. This proceeding was taken without my knowledge, and was *ultra vires*, being without the sanction of the Board and Government, which should have been first obtained.

14. Having now noticed the salient points in Mr. Lister's report, I find with disappointment that he offers no solution to the question as to how the canal is ever to be made to pay a fair profit on the outlay, or as to how Government is to be relieved from the continued pressure of the guarantee, which should long ere this have sensibly diminished, if, indeed, it had not totally disappeared.

15. The figures illustrating the Company's past and present financial position are all before Government, embodied in periodical Proceedings.

16. The causes of the Company's failure must, in my humble opinion, be looked for much deeper than in alleged departmental irregularities or administrative defects, which, although they might injuriously affect receipts, are powerless to make total shipwreck of a great undertaking.

17. As an immediately remunerative work, the construction of a canal through a very sparsely populated tract, composed largely of black cotton soil, in itself better adapted for dry than for wet cultivation, must now, by the light of experience, be admitted to have been a mistake, being a work unsuitable for private enterprise. The sole present value of the canal is as a provision against bad seasons, which may be taken as occurring once in ten years. The profits thus gleaned will never suffice to repay capitalists. Supposing that the ryots were as eager for as they are averse to wet cultivation, the labor required to raise paddy is so infinitely in excess of that required to raise the nutritious cholam and remunerative cotton crops, which the soil yields with little effort, that any sudden conversion of large tracts from dry to wet was, in the nature of things, impossible within the present generation. The required population does not exist, and the importation of the necessary labor, even if it existed, presupposes an amount of capital and enterprise which the ryots do not possess.

18. Next in order in the list of causes of failure must be placed the great original cost of the construction of the canal over and above what was necessary, and the absurdly extravagant scale of expenditure on salaried staff, which the Company have all along affected, and still continue. I have already brought to notice elsewhere that this latter item, even now that the canal has been fifteen years open, swallows up more than the total earnings.

19. The fourth cause is the exorbitant charge for water. This has been touched on above.

20. The mismanagement of the Company's officers, their hostile attitude to the ryots, their disregard of their habits and prejudices, their failure to adapt the canal

thereto, and the system of exaggerated complaints and argumentative correspondence pursued by the Chief Engineer and Manager, by alienating ryots and officials alike, have also contributed to place the undertaking in its present embarrassing position. I need, perhaps, hardly remind the Board that, in making these remarks, I do not speak from any personal bias, as there has been none of the unpleasant discussion alluded to since I joined the district.

21. The remedy I should propose is very simple. The scheme has for its sole objects the avoidance of throwing good money after bad, strict economy and good administration.

22. It is quite clear—a glance at any schedule of the Company's affairs *Vide* especially letter to Madras Government from Government of India, dated 24th March 1874, embodied in G.O., dated 2nd May 1874, No. 1,170, P. W. D. Letter from Government of India to Madras Government, dated 16th March 1875, embodied in G.O., dated 29th April 1875, No. 1,189, P. W. D. G.O., dated 22nd February 1876, No. 479, P. W. D. G.O., dated 31st March 1876, No. 836, P. W. D. demonstrates the assertion—that, as things are, both the shareholders and the Government lose heavily, and that there is no present prospect of material improvement. Ten years, certainly, have still to elapse before the State can, of right, take over the works at the market price of the shares. These shares have at present no real market value, that is to say, they are hardly ever quoted. On the only occasion on which I have observed a transaction in them during the last five months, the price was 107; but such an exceptional quotation cannot be taken as a reliable guide to the opinion of the money market, or to the true value of the shares. Under these circumstances, it does not seem unreasonable to suppose that the shareholders would listen favorably to overtures from Government, having for their object the return to the former of a fair sum for their property. The gain to the shareholders would be that they would recover some of their money, now uselessly locked up. The gain to Government would be an immediate saving of at least Rupees 1,00,000 *per annum* on the pay of unnecessary staff, and the bringing of the concern under direct management. An untold amount of power is worse than wasted at present, owing to the numerous departments who have to do with the work, and the amount of useless correspondence thus produced. The District Engineer could easily manage the canal with a Royal Engineer Executive and an Assistant Engineer in immediate charge. The salaries of these officers, with a subordinate staff on the same scale as that allowed on other Government works of a similar character, would be the sole charge on Government. The Revenue staff of the district without increment could attend to the Revenue and general administration.

23. I have made bold respectfully to throw out the above scheme for getting quit of the burden of the anomalous and costly responsibilities entailed by the connection of the Government with this Company, after giving much study and attention to its history and affairs, as every day serves only the more forcibly to drive home the conviction that no change less radical offers any well-founded hope of real improvement.

ENCLOSURE No. 1.

From A. L. LISTER, Esq., C.S., on Special Duty, Kurnool and Cuddapah, to the Collectors of Kurnool and Cuddapah, dated Kurnool, 15th August 1878, No. 252.

I HAVE the honor to submit a report upon the special work to which I was appointed by G.O., No. 3,435, dated 27th December last.

2. I arrived at Kurnool on the 12th January, and at once put myself in communication with the Collector, the Chief Engineer and Manager of the Company, and the Conservancy Engineer of the Upper Division, with whom I had many interviews; the selection of an entirely fresh office establishment was a matter of some difficulty, and took time.

3. It was quite clear that a prompt settlement was the first thing to be undertaken, and that a preliminary tour of inquiry would have been of little practical use, and would have prevented the settlement being concluded within the *faisli*; the Tahsildars of the Kurnool District were accordingly directed on the 5th February to state when the accounts of their taluk would be ready.

4. The Tahsildar of Nandikotkur, pleading the work of the census as a reason for delay, asked that the settlement of that taluk might not be commenced before the 15th May; the Tahsildar of Sirvail said he would be ready by the end of April; the Tahsildar of Nandial sent no reply; the Tahsildar of Ramallakota said the Jamabundy might commence on the 1st of March, before which date, however, he took furlough.

5. I decided to commence the settlement of Ramallakota on the 1st March, and I speedily found that I was the victim of a deception; nothing at all was ready, but the Tahsildar, who had entailed the waste of time by his erroneous report, was away on leave; there was nothing to do but to await the Curnam's pleasure, and it was not until the 1st of April that the accounts of Kulloor, the largest village in the taluk, were ready; the Curnam, it turned out, had merely copied the Company's accounts.

6. In March, however, while the tedious work of preparing the accounts of Ramallakota Taluk was going on, I went to Cuddapah to confer with Mr. Horsley and to talk over several points with Mr. Latham before his departure for England; I returned to Kurnool to finish Ramallakota Taluk, and then, reluctantly passing by Nandikotkur, I settled Nandial Taluk at Velpanoor and Ayaloor from the 6th to the 21st of April; Sirvail Taluk at Sirvail and Chintakunta, and Koilkuntla Taluk at Chintakunta, from the 22nd April to the 6th May; Proddatur and Jammulamadugu Taluks at Dhoor from 8th to the 20th May; and Cuddapah Taluk at Adimpally and Cuddapah from the 20th May to the end of the month.

7. There was a fortnight's office work to be done in totalling the accounts of the Lower Division and preparing puttas and returns; and on the 1st of June, with the permission of His Grace the Governor, I went to Ootacamund to talk over matters; on my return I travelled from Cuddapah to Velpanoor, where the settlement of Nandikotkur Taluk was commenced on the 28th June; on account of the rains I halted also at Jupad and Pagidial that attendance might be easier for the ryots, and on the 6th ultimo the settlement was concluded at Nandikotkur.

8. The failure of the Company is due to the following causes:—

- (1.) The absence of good Revenue administration in the taluks traversed by the canal.
- (2.) The unsatisfactory relations which have existed between Revenue officers and the Company.
- (3.) The feeling of antagonism which has arisen between the Company and the ryots.
- (4.) The high rates demanded for water before the advantages of irrigation were known.
- (5.) The uncertainty of a sufficient supply of water and the unsatisfactory arrangements for its distribution.
- (6.) The whole system of management which exposes the ryots to worries and exactions.
- (7.) The large amount of regada soil in the commanded lands.

The extension of irrigation has been affected, but not to such an extent as to make an appreciable difference between success and failure by—

- (1.) The sparseness of the population.
- (2.) The want of communication and the absence of local markets for rice.
- (3.) The unfitness of the large bullocks of Kurnool for deep ploughing.
- (4.) The lack of manure.
- (5.) The low level of village roads.
- (6.) Soudoo or efflorescence of salt.
- (7.) The general ignorance of the method of wet cultivation in Kurnool.

9. I have placed first and foremost the poor Revenue administration, because in my opinion no measures, how wise soever, could have succeeded under the arrangement that Government were to buy the water and sell it to the ryots, unless the district system of administration were such as to secure the ryots against over-charge and extortion, and to inspire the Company with confidence that all irrigation was properly brought to account.

10. Government have transferred their part of the contract to the shoulders of the Village Curnam, who, as far as I can make out, has been subject to no supervision worth the name and to no control; I do not find even the simple ordinary precautions of paging and stamping the village accounts books; the faint check of insisting upon regularity in the submission of accounts has not been enforced; no measurement has ever been checked by Revenue officers; the Curnam has been an irresponsible middleman, and a middleman we have been told is a person who plunders one party and bamboozles the other.

11. No attempt has been made to collect the canal revenue in Kurnool District; some of the Tahsildars did not even know what villages owed the money; before my arrival not one single demand notice had been issued for irrigation arrears; the village officers collected from the ryots what they chose to collect, and remitted as much as they thought fit to the taluk treasury at their pleasure; huge outstanding arrears on land irrigated and cropped can only be due to the incompetence or indolence of Tahsildars; the only remedy that is wanted is to apply the provisions of Act II of 1864.

12. A singular misapprehension about the liability of the irrigated land to pay the water-rate has arisen in every taluk; all the Tahsildars have thought that only the applicant for the water was personally liable, and that if he possessed no movable property the arrear was irrecoverable. As no inquiry is ever held, or ever could be held, about the means of applicants, it would not require much astuteness to evade payment of all canal revenue by entering the names of laborers in the applications. I have felt no hesitation in directing the attachment of the land on which arrears have accrued when the money is otherwise irrecoverable, and I hope that before Christmas nearly all the arrears will have been recovered; the only sums likely to be irrecoverable are those which are due for very poor land which has been relinquished in the meanwhile.

13. The Deputy Collector, Ramachandra Row, issued no puttas at all for dry crops for last fasli; it was for these crops that Government undertook to pay the water-rate provided a fair crop was not realised, and the Collector had decided that three-quarters of an average crop should be counted a fair crop; it is impossible to conceive a case where the issue of puttas was more imperative if the remission was to reach the ryots for whose benefit it was intended, for neither Irrigation officers, Tahsildars, nor ryots were present when the Deputy Collector ordered for what fields the water-rate should be paid by Government.

14. It was not until April that a ryot told me these puttas had not been issued; no official told me; when I pressed the Nandikotkur Tahsildar about his enormous arrears, surely then, unless he were purposely concealing the fact from me, he would have mentioned that ryots objected to pay until they received their puttas.

15. The dry crop books for Nandikotkur Taluk were with the Tahsildar; I wanted them to see what amount was to be paid by Government for dry crops, and on the 6th February I ordered him to send them to me; on the 27th February I sent another order; on the 13th March I wrote a third order; on the 13th April, having received no reply, I sent a *Peon to fetch the books*. I found the remission was not entered in some of them, so they were positively useless to the Tahsildar, and yet he would not return them to me; one of these villages in which the remission had not been entered by the Deputy Collector was Tommeloor.

16. I applied the Deputy Collector's scale of remission, had the books worked out, and returned them to the Tahsildar for the preparation of puttas. On the 6th June a remittance came from Tommeloor for Fasli 1286, which, after making allowance for the dry crop remission, was Rupees 240 in excess of the demand; the Tahsildar, without taking any step to ascertain what individuals had paid too much, ordered the amount to be credited in the taluk accounts for the following fasli, and sent the Curnam a taked to attend before the evening of the next day to make a corresponding correction in the office copy of the *Irsalnama*.

17. On the 15th June the Tahsildar submitted a list of arrears to me showing Rupees 832-0-9 to be due from Tommeloor for Fasli 1286; at the settlement there was a good attendance, and in accordance with the practice I adopted this year every ryot was told what he had to pay for canal water-rate, and then I took up the arrears; the village officers were wavering and shuffling, and gave unsatisfactory answers why so large an amount was outstanding; the Tahsildar sat mum; the Gumastah who drafted both the taked of the 6th June and the false return of the 15th stood by gazing into vacancy; at last my suspicions were aroused, and I told the Curnam not to leave the room, but to sit down in my presence and write out a list of defaulters, whereupon he produced the taked of the 6th June, and the position of affairs was clear. I at once asked the ryots if they had heard of the over-charge, and they all replied in the negative.

18. So the ryots of Tommeloor would have paid for last fasli what I told them was due, but the village officers had already got Rupees 240 of it credited in the accounts. An examination of the individual list of over-charges showed that some money has to be refunded; in other cases I had it entered in the putta as collected for this fasli, and the matter was fully explained to all the ryots.

19. But what protection did the Tahsildar afford to the ryots? When his disinterested retention of this dry crop book which was useless to him, the order to credit the excess amount for the following fasli without inquiry into individual cases, the false return of arrears of the 15th June, and his silence when I commenced my inquiry at the settlement are remembered, the case wears an ugly aspect; it shows, too, in some measure the difficulties under which I have been working.

20. It would be affectations in me to pretend to be ignorant that this report may eventually reach Government, who, I know, do not want to read the contents of an officer's note-book, but I must write according to the position that has been assigned to me, and it is, I conceive, the duty of an officer in the position of a Sub-Collector, in writing to the Collector of his district, to enter into the fullest possible detail about all matters connected with Revenue administration; besides, how else is the absence of good administration to be shown, but by pointing out a number of omissions in ordinary every-day work. I have, therefore, gone at length into the Tommeloor

case to show that my fear that the Deputy Collector's neglect to issue puttas for dry crops might, under the present Revenue administration, prevent the ryots getting the benefit of the remission is not fantastical and without foundation.

21. The Deputy Collector in charge of irrigation took the Curnams away from their villages and from their taluks, trailing after his camp to Kurnool. Many of the Nandial Curnams did not get back to their villages until the second half of August, no arrangements having been made for recording applications during their absence; the Tahsildar kept them a month at the Taluk Cutcherry in February for the alleged purpose of preparing the Jamabundy accounts; under such management work could not be expected to go on properly.

22. At the close of 1874 the Deputy Collector discontinued the payment of compensation to ryots whose lands were subsequently taken up; beyond issuing orders to the Tahsildars to put the Company in possession of the lands, nothing was done; no registers of these lands were prepared, and no steps taken to obtain sanction for compensation; all accounts on the subject are in dreadful confusion.

23. The cruel way in which arrears of revenue have been collected in Kurnool with extortionate process fees in defiance of the orders of the Board of Revenue presses very heavily upon the ryots; the surest way of preventing revenue being collected punctually is to issue demand notices to village officers with fees for service marked on them when they can keep for themselves so much of the process money as they choose, by the simple expedient of making an entry against the sum to the effect that it was collected before the notice was served.

24. In Bammakkala village, Nandikotkur Taluk, for instance, 172 demand notices were issued for 1,365 Rupees on the 26th December last with 12 Annas batta marked on each; some of the arrears were for very small sums Annas 4, (Annas 3-2, Annas 2-1, and least of all Pies 10), and yet 12 Annas batta was marked on all these notices, which were given to the Village Kuttubudi, who brought a list of defaulters to take to the Roddy for service; nothing, of course, was due under the orders of the Board of Revenue, and yet Rupees 129 was demanded from the village; the Curnam told me that the ordinary charge for the village is Annas 14, but a reduction of 2 Annas had been made in consequence of the famine; ryots subject to these extortionate exactions are naturally shy of increasing their liabilities.

25. Not a single Revenue Inspector or Curnam that I saw in Kurnool knew the district kistbundy.

26. Not a single Curnam has been tried under Regulation IX of 1822 for giving in false accounts about the extent of land irrigated.

27. All the Tahsildars seem unaware of the provision of Act III of 1869; to show how completely the Curnam is master of the situation, and how he rides roughshod over the Taluk Cutcherry as well as lords it over the ryots, I will quote the Tahsildar of Nandikotkur: "I send, I send, I send, but the Curnams don't come." He had not issued one Revenue Summons.

28. Administrative incapacity is more respectable than corruption, but it is equally mischievous in its operation; and as it is well known that village officers without check or control will grind ignorant ryots down to the uttermost point of exhaustion, a superior Revenue officer who gives them unbounded opportunities becomes in my view an active *crimins participes*.

29. No one seems to have the faintest idea of exercising practical supervision of any value; no measurements of Curnams are checked by Revenue Inspectors or Tahsildars; when I asked the Special Revenue Inspectors what they did when they went to a village, they replied that they examined the B register; further inquiry elicited that by examination they meant they had looked at the book in which the Curnam records applications; they had not measured any irrigated plots and seen if the irrigation tallied with the application; they had not told any ryots for what extent of land their applications were recorded; their visits, in fact, were absolutely valueless.

30. Tahsildars and their subordinates have treated canal matters with indifference, and an extension of irrigation, so far from being desired, has been regarded as an unwelcome nuisance, involving the preparation of more returns, for I do not think any Tahsildar can honestly say that the canal has entailed any trouble upon him since the land was made over, beyond collecting from Curnams and reducing into various complicated forms a quantity of figures of whose accuracy he knows nothing.

31. No Curnam in Ramallakota, Nandial, and Nandikotkur Taluks had when I arrived received an anna of remuneration sanctioned four years ago.

31A. No cultivation without application was reported in the monthly returns, though much was brought to notice at the settlement.

32. The Curnams generally have not got survey maps of their villages; none have been supplied for sale to Nandial Taluk; in Nandikotkur Taluk the maps are lying unused in the Cutcherry.

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33. The neglect to issue irrigation puttas for last fashi, the general withdrawal of the Curnams for lengthened periods from their villages, the payment of Curnam's remuneration being three years in arrears, the discontinuance of payment of compensation for lands taken up for the canal, accounts hurriedly cooked up on plain paper at the last moment for the creation of settlement figures, collection of water-rate entirely neglected, revenue collections made with extortionate process fees, no field measurements checked, no accounts whatever from twenty-eight villages in Kurnool sent in by the 31st December last, the Tahsildar's cry of impotence that he sends, sends, sends, but the Curnams won't come, the worthlessness of the work done by the Special Revenue Inspectors, the detection by Curnams and Revenue officers of no surreptitious irrigation, the omission to issue survey maps to Curnams, the general indifference of Tahsildars and their subordinates, cannot be put aside as sad instances which it is hoped are exceptional; they are given as general examples of the indifferent Revenue administration in Kurnool District, and the list by no means pretends to be exhaustive; if there had been no Tahsildars and no Divisional Officer, it is not clear that the difficulties of the Company would have been greater or their revenue less.

34. I have not spent as much time in Cuddapah District as in Kurnool; Cuddapah is much better in collections, and as promptness in collecting revenue is a great check upon over-rate, there is more reason to hope that in Cuddapah District sums in excess of the canal Curnams, who are often non-resident, and in some instances very poorly remunerated; as far as recording irrigation goes, the Acting Tahsildar of Cuddapah shall speak for himself: "All the Curnams have just copied the Amins' accounts. I sent for them to the cusbah and told them to prepare accounts. They promised to do so in a certain number of days; without Amins it was impossible to prepare accounts they said."

35. The Tahsildar of Jannulamadugu shall give evidence of the general lawlessness of the turbulent ryots in his taluk: "Murder is nothing to them. They kill a man just like an ant" he says. This language, I would fain hope, is highly figurative, but it indicates the unruly character and unmanageableness of the Cuddapah ryots.

36. There are no traces at all of administrative supervision; canal affairs have slid along anyhow as best they could, and the Company's Amins and Curnams have agreed what irrigation should be brought to accounts; no measurements have been checked; not only have no stamped and paged books been provided for canal accounts, but the Curnams complain of having been compelled to find their own stationery.

37. The difficulty of discovering anything in Cuddapah was even greater than in Kurnool; the Tahsildars seemed to know nothing; the ryots of Dugganapally, for instance, complained that no puttas were issued for the heavy charges imposed on them in the famine year; the Acting Tahsildar could give no information on the subject; the Revenue Inspector knew nothing except that the puttas had not passed through his hands.

38. The Curnam of Chinnamasapally asked if Pariahs might be admitted to the presence of the settling officers, from which it is inferrible that their position at former settlements has been one of insecurity and isolation.

39. Most of the taluks traversed by the canal have been under Native Divisional Officers, and not one taluk has had an European Divisional Officer other than the Collector; without entering upon the general question, I beg to submit that, as long as the Company is represented by European Officers at the settlement, it is essential, if the ryots are to have confidence in the administration and to feel that Government officers will have a substantial voice in determining their liability to water-rate and the amount they have to pay, that an European officer should be in immediate charge of canal administration.

40. Nandikotkur is an outlying taluk of the principal division; a Collector's work has much increased laterally of late years, and it is quite impossible in these days for a Collector to manage two taluks in addition to the general administration of the district; the Collector may be expected to enter with interest into inquiries under Regulation IX of 1822 and into trials under VI of 1831, and other small questions daily requiring time and patience but no experience which are managed in an adjoining taluk by a young officer of two years' service.

41. I think that a permanent Sub-Collector is required for the Kurnool District, with the charge of Nandikotkur, Nandial, and Sirvail Taluks, and of the few irrigated villages in Kail-kunta Taluk, which might perhaps be transferred to Sirvail, and with head-quarters at Nandial; independently of the canal these taluks require to be brought under European supervision, and with more active and vigorous general administration the Canal Company would have no hindrance to irrigation to complain of except such as arise from the canal rules; the desired result will not be secured by transferring the Head Assistant Collector from Cumbam to Nandial, for Head Assistants are often very junior officers, and their office establishment is notoriously underhanded.

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42. In Cuddapah District I think the irrigation work should be undertaken by the Collector himself; when once things are in order, the work will not be at all heavy; the Collector, as no other officer can, is able to ensure punctuality in the submission of returns, and to make the Tahsildars travel more and exercise a real and effective check over Curnams and Revenue Inspectors by doing a little field work, which they now entirely neglect; the irrigated villages all lie within a morning's ride of head-quarters; Government would get the advantage of a Collector's head and experience going into the very heart of the details of canal administration, instead of every referred question being sent on to a Deputy Collector for report; there is in my view a very wide difference between the value of an opinion formed on another man's report and one formed on one's own investigation and inquiries; in Kurnool District the Collector could not possibly undertake the work on account of the long distance.

43. There is no inconsistency between this recommendation and my contention that a Collector cannot undertake direct Revenue charge of two taluks; there are only fifty-five villages irrigated in Cuddapah District, and half the revenue is derived from eight; direct charge of canal matters involves no revenue suits; what is wanted from the Collector is power, vigour, direction, and intelligence, of which all Collectors have an ample store and not much time, of which they have but little to spare; there is little or no canal work other than office work during the months when the Collector of Cuddapah has his head-quarters in the sub-division.

44. If these measures are approved, Revenue administration may be expected to improve, and all grounds for complaint, which undoubtedly exist at present, will be removed; if the sufficiency of them is doubted, I can only further suggest that a Member of the Board of Revenue should make an annual tour down the canal, and possibly the Chief Engineer for Irrigation could arrange to come at the same time, when all shortcomings could be pointed out and immediate and authoritative inquiry held on the spot. I hope, however, that the measures respectfully suggested in the earlier paragraphs will be sufficient to secure good administration; the immediate steps I am taking are explained in an accompanying memorandum (Enclosure A).

45. The unsatisfactory relations of the Company with Revenue officers have arisen in a great measure no doubt from the indifferent Revenue administration heretofore described; the officers of the Company have endeavoured to remedy a state of things which was prejudicial to their interests in an unwise manner, which necessarily produced friction and increased the existing alienation; fourteen years ago the Secretary of State regretted the absence of cordial co-operation between the Collector and the Chief Engineer, and I do not think anything has occurred during all these years to mitigate or remove that feeling of regret.

46. Instead of trying to get things put right quietly by addressing local officers and being reasonable in their demands, every trivial complaint has been embodied in their monthly reports which are always printed, and which enjoy a moderate amount of official circulation; reports brought to a Collector's notice in this way are immediately regarded from a defensive point of view; and instead of the Collector's authority, weight, and influence being invoked in his executive capacity in the usual way when he would at once try to see what wanted rectifying, a Collector would not be human if he did not set himself to show, if he can, on how slender a foundation the complaint against his district rests which has been laid before Government by the Chief Engineer for Irrigation.

47. I would respectfully suggest that the Company should not be exempted from the usual rule of Government, which requires aggrieved persons to address themselves in the first instance to the local authorities; and it would, I think, tend to more harmonious working if matters other than engineering questions were disposed of by Government in the Revenue Department. I think there should be the same channel of communication on all subjects about the canal; and as the Chief Engineer and Manager brings any question he chooses direct to the notice of Government, one of two courses should be laid down: Collectors should address Government direct in the Revenue Department about canal matters, or else the Chief Engineer and Manager should forward his monthly reports to Government through the Collectors and the Board of Revenue.

48. The Company is decidedly unpopular with the ryots; from the first the Company has refused to believe that the ryots would not take the water simply because they did not want it at the price; it was the indifference of the Collector, the non-publication of rules, the indolence of the Tahsildar, or the opposition of the village officers; anything but the plain unpalatable truth that a canal had been made in a country where the ryots did not appreciate or understand the advantages of irrigation; and the high initial prices demanded for water made ryots more determined than ever to follow the system of agriculture to which they and their fathers before them had been trained.

49. Constant complaints against the village officers turned the village influence against irrigation; injudicious threats of prosecutions, the wholesale imposition of fines without notice, attempts to realise inequitable charges under the letter of the rule, and above all the imposition of surreptitious rates when channels overflowed, made the well-to-do ryots of a village exert all their influence to prevent irrigation spreading into their village at all.

50. The Company then embraced the idea that poor ryots have a kindlier appreciation of the advantages of irrigation than their wealthy neighbours, and that if they were removed from the malignant influence of obstinate and self-sacrificing opposition, they would embrace irrigation joyfully with advantage to themselves and with profit to the Company, so the hobby of minute sub-divisions of fields was mounted and ridden to death; the attempt to make the canal answer by irrigating little plots of less than an acre—for an acre can be irrigated without sub-division—could hardly answer; any endeavour to encourage poor ryots to undertake an experiment which the well-to-do shrink from is hazardous; to have wealth and influence on one's side is an object worth striving for in this world.

51. It may be possible to run in the face of nature in the construction of a canal, but it is impossible to wean ryots from the habits of centuries and the customs of their forefathers by any other means than judicious influence poured into the channels where they usually look for direction, assistance, or advice; where a policy of conciliation was eminently needed the very opposite tactics have been pursued; the position of the Company between the Revenue authorities on the one side and the ryots on the other has been like that of a juggled catling in the inflamed soft parts, inflicting a fresh kind of ugly wound on both sides at every movement.

52. The demand of high rates for water before the advantages of irrigation were known was a gigantic suicidal initial error, which it is difficult to understand, for it is the sort of mistake which nobody makes now-a-days in the ordinary transaction of life; when customers are wanted by thousands the attraction of low price is almost invariably tried until a business is established.

53. The only apparent excuse for this fatal blunder is that everybody seems to have shared it; it was assumed by the Deputy Director of Revenue Settlement and by everybody else that the ryots would avail themselves of the water as soon as they could get it; the Company were possibly misled by this general delusion into fixing what they considered a fair price for the water with reference to the cost of their works and the area they could irrigate, without taking into account that there was no demand for the commodity they had brought into the market.

54. The uncertainty about the sufficiency of the water-supply is one of the most serious obstacles to the spread of irrigation; the Company do not deny this, but they attribute it entirely to one cause, viz., the improper interference with the distributing arrangements by the ryots themselves.

55. It is with great diffidence that I submit an opinion upon an engineering question, but the main distributary channels appear to me to have been constructed on a bad principle; they have not been made so that water flows from them into the smaller distributaries by a natural fall, but the minor channels are very often on a slightly higher level than the main channel, and water has to be diverted into them by dams; these dams are not generally made of smooth masonry, but are what is called dry-stone dams.

56. Dams of this description are very easily lowered or raised, and they are the scenes of constant squabbles and fights; the Company's case is that the dry-stone dam constructed by them was of precisely the right level, and that if the ryots had left it alone, it would have diverted sufficient water into the minor channel and left enough flowing down the main channel; the ryots ask with some show of reason if it is likely that they would wish to interfere with perfect arrangements which gave them enough water; it is only because the dam does not divert enough water into the minor channel that they wish to raise it; the Company reply that this deficiency is owing to waste of water, and contend that they send enough water down the channel to irrigate the cultivation under it.

57. If the Company really can carry down the canal enough water to irrigate 200,000 acres, while the cultivation is limited to 50,000 acres, and while ryots who do not understand wet cultivation are wasteful of water, as they no doubt are, simply from ignorance and not from any base desire to do the Company all the harm they can, it would seem wiser policy to discharge enough water to bring the crops to maturity according to the ryots' present mode of cultivation. I do not forget Mr. Latham's contention that every additional drop of water carried down the canal increases the cost of upkeep and repair (though he says that a month's water poured into a tank makes no difference), but I think it would pay the Company better in the long run to give the ryots the water they want, while there is an abundant supply, than to wage a crusade against waste.

58. The late Collector of Coimbatore, after a term of service which had extended beyond the allotted span, submitted an opinion that nothing would prevent ryots helping themselves to more water than they require for rice cultivation except the sale of water by measure; to attempt this remedy at the present time would be tantamount to closing the canal.

59. It must not be supposed that I think lightly of waste, but I see no means of checking it without stopping the extension of irrigation; if sufficient water to irrigate 200 acres were discharged down a channel under which only 100 acres were cultivated, and if the owners of 80

acres which were favorably situated helped themselves to so much water as not to leave enough for the remaining land, and if the Company refused to supply more water on the ground that double the necessary quantity was already supplied, the 20 acres which did not get enough water would abandon irrigation.

60. When cultivation extends and ryots are eager for irrigation, and all the water which a sluice discharges is wanted, the powerful motive of communal interest will be exerted in favor of economy; so I disagree with Mr. Latham and the Chief Engineer for Irrigation that the longer waste goes on the more difficult it will be to check; the idea of training up the ryot in the way he should go in the matter of wet cultivation, and teaching him from the first how to manage an untried mode of agriculture as though he were accustomed to it by the aid of punishments and penalties, is a very pretty one, but I fear it will not admit of practical application.

61. The Conservancy Engineer of the Lower Division thinks that there is a great deal of surreptitious irrigation in Sirvair Taluk; possibly he is right; but if he is right, it is very likely that the water which would be sufficient for the applicants is so diminished by the surreptitious that the water which would be sufficient for the fields that have applied for water; in this case it is no answer to the applicants to tell them that so many cubic yards an hour are discharged down their channel, which is sufficient to irrigate double the amount of land applied for; the question simply is—and for the future this must be the question at the settlement—whether every field for which canal water-rate is claimed got sufficient water to bring the crop to maturity or not.

62. Some of the main channels cannot carry a sufficient volume of water; the Tudicherla channel, for instance, twenty-one miles long, which was made to irrigate twelve villages, is used to carry water to twenty-two villages; the landholders at the end of this channel complain of an insufficient supply. I do not think that the Company's Engineers pay sufficient attention generally to the state of the distributary channels, and I fear that even less attention than usual has been given to them this year, as the time of the Engineers has been fully occupied in supervising the construction of the new navigation works; it is no use telling ryots who apply for channels that a number of channels have been made thirty or forty miles off which nobody uses, and that if they are anxious to try wet cultivation they can leave their fields, their homes, and their friends, and apply for commanded land in far-away places.

63. The distribution to particular field is nobody's business; in theory the Company undertake it, but they do not maintain a sufficient staff of servants to do the work, and what is practically the method at present is this: ryots manage the distribution among themselves as best they can, and in case of dispute a banker is called in to arbitrate.

64. The Chief Engineer wrote last year that "nothing is more calculated to check irrigation than an uncertainty whether the supply of water will be secure or a certainty that the applicant will need to fight or bribe for the water during the growth of the crop." I cannot imagine any system more likely than that in force to bring about the fighting and the bribing when the supply is insufficient.

65. The simple remedy was proposed by the Board of Revenue fifteen years ago; the gross provision for each village should be left to the Company's officers, and the individual distribution should be left to the village officers and ryots; when more than one village receives water from one sluice, regulating weirs should be of smooth masonry; the head of the village should be definitely and unmistakably entrusted with the work of regulating the individual distribution with the assistance of the Village Nirkatti.

66. In addition to the insecurity of sufficient supply while water is in the canal, there is also the doubt about when the canal will be closed; the Chief Engineer for Irrigation has expressed an opinion that sugarcane might be profitably cultivated, but I think great caution should be exercised in influencing ryots to prepare ground for sugarcane cultivation—the most expensive of all cultivation in its beginnings—when there is a chance of there being no water at all for the three or four hottest months when it is most needed.

67. I will now respectfully submit my opinion upon the rules. Mr. Latham proposed the omission of Rule I; it was deliberately retained after discussion in accordance with the views of the Board of Revenue, but the Company do not observe it, and do not furnish the list annually.

68. A general description would hardly be of much use for working purposes; what is wanted, if applications are retained, is a list of fields which the Company are prepared to supply with water as proposed by Mr. Foster; the fields through which main channels run are constantly irrigated, but water can only now be turned on to them by a dam being placed in the main channel; these fields should in my opinion only be irrigated by lift and not by flow until water is carried to them by small channels taking off at a higher level; but an application for irrigation by flow is recorded; the ryot puts a dam across the main channel, without which he could get no water at all; no objection is raised to this until the villagers lower down the channel grumble about an insufficient supply; then the Company complain of the necessary dam, and say that ryots are not allowed to construct dams in the main channels.

69. I think the Company should be required to furnish before the 1st July next what Mr. Foster asked for, a list of the numbers or portions thereof in each village which can now be irrigated from the canal; this would be very useful for working purposes, and it would also enable us to know with accuracy what land really is commanded by the canal with the existing subsidiary works.

70. At the general meeting of the Company held in 1875 the Chairman said: "All we ask is nothing more than this, that any one who wants water from our works may have it simply by asking for it." I see no means of securing this desirable simplicity of procedure except by the entire abolition of applications for commanded lands; when new channels are required the cultivators should enter into engagements to take the water at the stipulated rate in such numbers and for such terms of years as may warrant the required outlay, in accordance with the principle laid down by the Secretary of State in his despatch of the 24th November 1863, No. 81.

71. This abolition of the system of applications can only take effect after the individual distribution of water has been formally and regularly handed over to the village officers; then a ryot would simply have to ask the Reddy or Nirkatti to turn water on to his field in his turn, and in accordance with the custom of the country it would be the duty of the Curnam to enter the irrigated area in the accounts; among a people who cannot read and write there is a wide difference between getting an application recorded and merely asking for water.

72. I believe applications are one of the greatest hindrances to irrigation, and, so far from their being of any use, I consider they are productive of great harm in securing a false basis on which all the accounts are prepared.

73. The mode of receiving and recording applications has been the subject of much correspondence and considerable disagreement; the result of my inquiries, as far as they have yet gone, is that an organised system of peculation is carried on in regard to them, and that blackmail varying from 4 Annas to Rupees 2 is levied generally down the line for recording an application.

74. A ryot is absolutely and entirely in the hands of the Curnam for no ticket is given, and even though he applies with the customary offering, from oversight or malice his application may not be entered in the book; the Cuddapah ryots complained bitterly of the insecurity of their position. A ryot with an irrigation putta of Rupees 200 was charged with 15 acres of surreptitious paddy which had been cultivated for years; he had applied, he said, again and again to the Curnam to record his application, and he had complained to the Company's Overseer, but not to the Tahsildar, of the Curnam's neglect; to avoid a fine he had to attend at the settlement.

75. Many of the Cuddapah ryots asked that the Curnam should be compelled to give tickets, but I do not recommend this even if applications are retained, as it would be an additional hindrance to irrigation; ryots would be afraid to cultivate until they received the tickets, and so fewer fields would be irrigated; with the additional staff of Revenue Inspectors which has now been sanctioned, the Curnam will not have the same opportunities as heretofore, for every village will be visited monthly, and a ryot will be able to report his irrigation to the Revenue Inspector, and so secure himself from fine.

76. But I do not find in any of the correspondence on the subject the advantage of applications laid down; they seem to have arisen from the general delusion that there would be a rush for water, and that the Company ought to be informed of the demand to enable them to regulate the supply; a further restriction was even suggested that as a rule applications should not be received after a certain date.

77. The general expectation has unhappily been falsified, and instead of the supply following the demand it has preceded it; so it is not clear that applications are of any good at all; the water is there ready to be turned on to the field of any ryot who will have it; let him merely ask his village officers for it and take it on the day he wants it; at the beginning of the season the village officers will, of course, have to ask for the sluice to be lifted, and the recorded irrigation at the end of the month will enable the Company's servants to determine how much water should be discharged from the sluice.

78. I do not believe it possible for a single acre of land to be irrigated in a village without the Curnam knowing of it; when it is recognised as the Curnam's duty to record all irrigation, and when it is known that he is liable to a fine of Rupees 500 if he neglects to do so, there are but very few ryots who are bold enough to take water without informing him, and there are scores of people to tell of any bold man who makes the venture.

79. All the *Kusser* or *Teerwajasti* in the richer southern districts is collected in this way; there is no doubt one great difference which I do not forget, the water there available for the irrigation of land in excess of the registered ayacuts is limited and coveted, and any one helping himself to water without authority directly injures those who are entitled to a supply, while here,

with only thirty or forty thousand acres under irrigation, a man who filches water does no harm to any of his neighbours as the supply is only limited by the capacity of the distributary channels.

80. But applications are of no use in preventing theft of water; a man who means to run the risk and wishes to get water without paying for it is in no way restrained by the system of applications; for the punishment, for surreptitious irrigation is so small that it is well worthwhile to run the risk; a man irrigates 10 acres of raggy; if he is caught he pays Rupees 45 instead of Rupees 40; if he can square matters with the Company's Amin and the Curnam, he avoids payment of Rupees 40, which leaves ample funds at his disposal to satisfy illicit demands.

81. There seems to be a general agreement that applications are of no use for first class crops; I do not believe they are any protection in the case of third class crops, for making the application and taking the water are simultaneous operations; there is no reason why a ryot who is hoping for rain should apply for water a day before he turns it on to his field.

82. Actual irrigation and not what the Curnam chooses to write the ryot said must form the only safe basis of accounts; applications are unintelligible to the general body of ryots who cannot read or write, and they do not like entering into a written contract which they cannot understand. I beg cordially to endorse Mr. Latham's opinion recorded in Board's Proceedings, No. 1,175, of the 15th March 1877—"They hate the bother and possibly vexatious little oppressions of applying properly; very rarely apply for the full amount they want, if indeed they know what they will want, and then they become liable to extra rates."

83. This condemnation of the system of applications, sweeping and complete though it is, is perfectly true; ryots hate it; it is accompanied with oppressions; ryots do not know the extent they want to irrigate, and for their ignorance of acres and cents they have hitherto been mulcted in punitive charges.

84. The inquisitorial enquiries which the Company's servants make into shares and divisions would be rendered unnecessary if applications were done away with, for they would simply have to measure up the irrigated plots without separating them into the two great divisions of irrigation with application and irrigation without application, and without asking who had to pay the water-rate; this would lead to a great simplification of accounts, and the demands would be based on actual irrigation, and not upon indefinite applications for water which may or may not have been supplied.

85. The recommendations which I am respectfully submitting must be taken as a whole; though I believe applications to be absolutely valueless, they have hitherto served the purpose of being something on which a demand has been based, and I should hesitate to recommend their entire abolition unless the revenue administration is improved and the increase of Revenue Inspectors which has been sanctioned for a year is continued. I must also say that large results cannot be immediately expected, time as well as other remedial measures is wanted to cure a chronic disease.

86. There has seemingly been some misapprehension about sub-divisions of fields; the officers of the Company have throughout considered that sub-divisions would be accompanied by demarcation; the draft rules of 1874 provided for demarcation, but the Board of Revenue objected and Government sustained the objection; the word was again introduced into the draft rules of 1876, but it was struck out by the Board of Revenue; on the 5th January last Mr. Latham wrote to the Collector of Kurnool that it would take two years to complete sub-divisions for the existing irrigation, clearly showing that he was thinking of demarcation.

87. Demarcated sub-divisions would obviate the necessity of numerous minute annual measurements, and would be a distinct advantage to every one who has anything to do with canal administration; but the sub-division which the Curnam is authorized by Rule III to make for the purposes of irrigation is of no practical use, except to enable ryots to evade the limit of one acre which is fixed in the earlier clause of the same rule.

88. I beg to deprecate this queer sort of sub-division made on paper only for purposes of irrigation of no legal force so far as I know, and without even the semblance of permanence, for the Board of Revenue object to such numbers being given as the areas irrigated vary from year to year.

89. Under Rule III so small a plot as one acre can be irrigated, and I submit that facilities should not be given for the evasion of this limit; unless the smaller area is really a separate property, legally secured by deed of partition or otherwise so as to justify the issue of a separate putta, it should not claim exemption from the one-acre limit.

90. At present any area how small soever can be irrigated if the Curnam can be induced to say that that small portion constitutes the share of one member of the family, with the result of a very great number of very small measurements being annually made with the minutest exactness; the rule no doubt lays down that these sub-divisions should be reported to the Tahsildars, but it is not clear what object would be attained by the report, nor would it seem fair to make ryots pay more because the Curnam omitted to send the report.

91. The subject was last discussed in Board's Proceedings, No. 5,218, of the 12th December 1877. In his letter recorded in those Proceedings Mr. Latham proposed that measurements should be by the eighth of an acre; the charge for Government water-rate is by the half acre; the measurements of the Company are carried down to the uttermost point of minuteness, a deficiency or excess of even one cent being separately recorded and charged in the accounts.

92. This is quite impracticable; it has only hitherto been possible by the irrigation being on so petty a scale; but such accurate measurements are beyond the capacity of most Curnams and an unsatisfactory result of this has been that the important work of measurement has been left entirely to the Company's Amins, whom the Curnams have felt themselves morally bound to support.

93. I submit that the charge for portions of fields in excess of one acre should be by the quarter acre; this is the mean between the area proposed by Mr. Latham and that adopted by Government, but it is not on that account that I suggest it; the half acre is perhaps a little too big as unduly increasing the temptations of the measurers; the eighth of an acre is too small as involving measurement in many cases where a Curnam's practised eye could discern at a glance whether the irrigated plot over and above an acre exceeded a quarter of an acre or not; it is an incidental advantage too that a quarter of an acre can be expressed in two figures of decimals: if this rule is adopted no account should be taken of areas not exceeding five cents, so that A. 1, D. 05, would be charged as an acre only; this five per cent. margin would be in exact proportion to the Government margin of 10 per cent. when the charge is by the half acre. I wish orders on this point could be received by the 1st of November.

94. Mr. Latham further proposed that the minimum area for third class crops should be raised from one acre to four acres; I will endeavour to state the *pros* and *cons* fairly.

95. These third class crops stand on an entirely different footing to first and second class crops; if a ryot wishes to undertake paddy or garden cultivation by all means let his wishes or his purse determine the extent of his experiments and therefore so small a limit as one acre has been fixed, but water is only taken for third class crops when the usual rains fail, and if canal water is required for two acres in a four acre field, it is undoubtedly required and almost certainly taken for the whole field when it is cultivated; a tolerably extensive system of fraud has been carried on by ryots applying for portions of a field and irrigating the whole of it.

96. Mr. Latham, I believe, was influenced in making his proposal by the enormous number of measurements entailed in the famine year owing to the large extent irrigated for third class crops, but rules should not be altered to meet exceptional circumstances; the true remedy I conceive is the employment of a larger staff of measurers to meet the heavier work of an exceptional year; at present there is no reason to believe that in ordinary years there will be many measurements of portions of irrigated fields under third class crops.

97. Constant change of rules is to be deprecated, for every change gives additional power to the Curnams and increases their opportunities for peculation; the rule would be wholly inoperative as long as the system of charging for what the Curnam chooses to call a share is continued, for he could evade the four acre limit as he now evades the one acre limit.

98. It is further quite reasonable to suppose that in a year of scanty rain-fall a ryot might elect to make the practical experiment of ascertaining the difference in outturn from an acre of irrigated land and from one acre of rain-watered land.

99. The charge for one acre and for no less may perhaps in time be understood by most ryots, but a different minimum area for various crops never will be understood by them; every effort should be made to simplify rules and procedure, for until this is done it is impossible to say with certainty whether the rules operate as a hindrance to irrigation because the ryots do not like them or because they do not understand them; to make this alteration and then to charge a ryot for four acres who had only irrigated one, would be unjust and impolitic; I am therefore unable to support Mr. Latham's proposal and I recommend that the same minimum area of one acre should apply to all crops.

100. For mixed crops the minimum of one acre should be charged for the most highly rated crop; a singular result of this rule not having been laid down is that a ryot can diminish his liability by taking or by getting the Curnam to say that he took water for a third class crop, e. g., if one ryot in a field of larger extent than an acre irrigates C. 25 for paddy he is charged Rupees 6; another ryot who in a field of the same size irrigates C. 25 for paddy and C. 75 for cholam, is charged only Rupees 3—Rupees 1-8-0 for the paddy and Rupees 1-8-0 for the cholam; this is bad in principle and unfair in practice.

101. I also think that Rupee 1 should be a minimum charge for irrigating any plot of land; a number of walled gardens are watered in Kurnool and such charges as these appear in the accounts C. 15, A. 9, P. 7, and C. 12, A. 7, P. 8; this is merely a matter of convenience to save minute measurements and troublesome fractions; the water is certainly worth one rupee.

102. Much irritation has been produced by Rule IV of which, under any circumstances, I advocate the rescission; if applications are abolished this rule goes with them; if applications are

retained I beg to recommend that the water-rate for surreptitious irrigation should become payable within thirty days of the receipt of a demand for it; this would be sufficient to induce all ryots who mean to pay for the water to register their applications.

103. A fine of 8 Annas is enough to irritate honest ryots, and inadequate to deter dishonest ones from stealing water; the words "offence" and "fine" smack of criminality and cause annoyance and heart-burnings; the general aversion to these terms really astonished me, and ryot after ryot declared that it was not "theft" and that he ought not to be branded as an offender and fined.

104. It has hitherto been the custom to fine all ryots without notice when the land irrigated by them exceeded the extent entered in their applications by half an acre, but I determined immediately on my arrival that I could not pronounce any one guilty of an offence and sentence him to fine without giving him notice of the charge against him; lists of surreptitious cultivators were sent to each village with a special notice that they should appear at the settlement and show cause why they should not be fined.

105. No list was furnished to me of the irrigation by applicants in excess of the extent entered in the application, and so no fine at all was imposed on applicants; the story of nearly every one who appeared was that he had told the Curnam, who sometimes admitted the application, but generally denied it; we decided to believe the ryots for once instead of the Curnams and no fine was imposed upon any one who came to the settlement and said he had applied; the result of this was that, although the demand for last fasli was three-fifths of that of the preceding fasli, the fines fell in one year from Rupees 6,900 to Rupees 950.

106. In regard to fines I will give one instance of what, in my opinion, was a very hard decision for the ryots, as decisions of this sort increase the unpopularity of the Company and make ryots distrustful and suspicious.

107. One of the Company's Amins went to Erraguntla in Sirvul Taluk on the 23rd December 1876, and found 323 acres irrigated which were not entered in the application register; these fields were accordingly entered under the surreptitious head, and at the settlement the Company claimed fines; the Curnam said that the ryots had all applied to him, but that he deferred making the entries until he had measured the plots, not at all an unreasonable precaution to take when it is remembered that a mistake of half an acre entailed a fine; the Deputy Collector said there had been no intention to evade payment, and although the cases fell within the letter of the rules, he urged that the rules should not be worked prejudicially to the interests of the ryots; the Conservancy Engineer who was conducting the settlement with him disagreed, and the question was referred for the decision of the Collector and the Chief Engineer.

108. The following decision was given by Mr. Latham and Mr. Knox, the Special Assistant Collector:—"Fines should certainly be imposed. We have nothing but the Curnam's own word to go on that there had been applications to him. The Curnam ought at once to have recorded all applications and then have made the measurements."

109. There would no doubt have been the word of the ryots as well as that of the Curnam if any one had asked them, and there could not possibly be anything else; even supposing the Curnam did neglect his duty, about which I can express no opinion as I do not know what the famine calls upon him were just then, it would appear to have been both inequitable and impolitic to impose a fine of Rupees 161 on the ryots of Erraguntla, for in a year of no rain-fall they tie to impose a fine of Rupees 161 on the ryots of cultivation would pass undetected: the canal revenue in this village fell in one year from Rupees 1,913 (inclusive of the fine of Rupees 161) to Rupees 274, although the canal revenue of the whole district has only fallen by one-half.

110. As no record has been kept of previous convictions it is not possible to impose the enhanced punishment on old offenders.

111. The measurement by canal officers authorized by this rule has been a constant source of trouble; the Amins require the attendance of the Curnams and are constantly complaining of their absence and inattention; the Amins are not a class of men under whom Curnams will ever work willingly; one for instance in Proddatur was a dismissed Curnam, another in Nundilkotkur looked after thirty villages on a salary of Rupees 15.

112. It is not laid down in the rules that the Curnam should accompany the Amin and Overseers in their measurements, and I do not think they should have to follow the Company's servants through a whole village; let the Curnams measure up the irrigated plots, checked by Revenue Inspectors and the Tahsildars; if the Company think there is any unrecorded irrigation in a village let them measure up the irrigated fields and if they claim more than the Tahsildar admits then there must be a joint measurement by the Revenue Inspector and Amin, and it would be the Curnam's duty to accompany the Revenue Inspector; but when the Company's full demand against a village is admitted, there appears no reason except for deciding what irrigation is surreptitious and what is not—why the Company's officers should make any enquiry at all into individual cases; I greatly hope that applications will be abolished in which case there will be no surreptitious irrigation, no necessity ordinarily for double measurements, and the village officers

will be relieved of the irksome control and constant fault-finding of a class of men to whom it is not right or fitting that they should be in any sort of subordination; as long as measurements are made to a cent. Curnams cannot work *with* an Amin, they must work *under* him.

113. The last clause of Rule IV offers a direct premium to surreptitious cultivators; if applications are of any use and are prescribed by the rules under no circumstances should a surreptitious cultivator be placed in a better position than an applicant; last fasli 42 acres of double crop were charged on application at the rate of Rupees 12 an acre; had no application been made the charge under this clause and Clause 5 of Rule VI would have been Rupees 6 up to 31st December, Rupees 4-8-0 at the monthly rate up to 31st March, and 8 Annas fine; in all Rupees 11.

114. I would ask especial attention to Rule V and to the ruling which has arisen out of it, that no remission is claimable for failure of water after December 31st. In a letter, dated 13th February, Mr. Latham wrote to me as follows with reference to Board's Proceedings, No. 5,216, of 12th December 1877:—Mr. Latham fell into the error of supposing that the Proceedings of the Board were a minute by their Sub-Secretary, as he signed the copies of the extract.

115. "Mr. Dalton's paragraph 9, page 9.—This is a very important step to take. The restrictions are injurious to the spread of irrigation. After the commencement of rains in September this official year ryots who sowed wet crops did so under a chance of having the canal water stopped in January and their crops lost without any remission being granted. In ordinary years in the Kurnool District the ryots have not always time to sow all their dry lands (which must be done in July and August), and they sow wet crop in time to get the latter harvested within the year."

116. I agree with Mr. Latham that the restriction of which he speaks is injurious and highly dangerous; many of the rice crops in Cuddapah require water in January and if the canal were closed on the 1st January, and ryots were made to pay Rupees 6 water-rate for a crop that had withered from deficiency of water, irrigation would receive a check from which it would take years to recover.

117. The rule is certainly restrictive and injurious; the object of it would seem to be to make ryots sow earlier, but the time has not yet arrived for imposing restrictions on irrigation; of course if remission is given for failure of water after the 31st December the theory of realized earnings disappears, but is it worthwhile to impose what Mr. Latham considers an injurious restriction on irrigation for the purpose of developing or sustaining a theory which may justify the payment of money before the settlement? The only one simple rule for crop rates which ryots will ever understand is that sufficient water should be given to bring the crop to maturity in short, no crop, no water-rate.

118. With regard to Clause 1 of Rule VI, I think it should be clearly stated in the rules themselves that nothing at all can be claimed for second crop unless sufficient water is supplied to bring the crop to maturity; under the *letter* of Rule V and Rule VI, Clause 1, a ryot making a second crop application in December would become liable to the full rate of Rupees 6, even though the canal closed in January, for the Company do not guarantee water after the 31st December; the Conservancy Engineer of the Upper Division put this argument forward and Latham agreed with me that no charge could equitably be imposed if the crops withered for want of water.

119. It is not very clear from the rules what the charge for sugar-cane and other double crops is meant to be; 42 acres have been charged at Rupees 12; in other cases 6 Rupees has been charged up to the 31st December, and Rupees 1-8-0 a month afterwards for the period for which water was available; Clause 5 of this rule would seem to make it clear that the latter charge is correct, but a 12 Rupee rate is still retained in the forms sent from Madras; as the canal is never likely to be open after April 30th I think the charge for double crops should be clearly laid down to be 6 Rupees up to the 31st December, and Rupees 1-8-0 a month afterwards until the closing of the canal, but in no case to exceed 12 Rupees, only the exact extent as now being chargeable.

120. Clause 2 of Rule VI raises the important question whether a four-year lease should be taken from ryots who claim the benefit of the reduced progressive rates; in sanctioning the rules of 1874 Government observed that the cowl system was an improvement, but the cowl system has not been introduced; no accounts have unfortunately been kept of the different fields irrigated each year with rice, and as it is impossible to wade through the old settlement books to discover if each field has been irrigated for rice in previous years, the Curnam's statement has been accepted, except in a very few instances where the clerks of the Company have shown him to be wrong.

121. This can now be altered and I hope to have proper accounts ready before the next settlement showing in numerical order the fields that have already been cultivated with rice, so the question need only be considered with reference to what is best for the Company and for the ryots, and for the extension of irrigation.

122. The object of the rule was to induce ryots to prepare ground properly, and to diminish the primary expenses of embarking upon paddy cultivation; the effect of it has been that the low rate has induced ryots to try a few acres as an experiment, but of the 3,500 acres of new land, which have been annually sown with paddy since the progressive rates were sanctioned, not one-third have been persevered with until the third year when the rate is 5 Rupees.

123. I would not interfere with the first year of experimental tillage, and for this I would leave the attraction of the low rate of 3 Rupees; but I think it would improve the farming, benefit the ryots, and prove remunerative to the Company to insist upon a four-year lease afterwards unless the full rate of Rupees 6 is paid; the rates in the clause would be the rates for the lease; the charm of paying Rupees 3 instead of Rupees 6 for the second year would be a great inducement to many ryots to enter into leases, and it would answer.

124. I feel sure to give water for two years at the popular rate of 3 Rupees if it secured a considerable amount of land being carefully prepared for continuous paddy cultivation and a number of irrigation leases being granted; this would diminish the water-rate for rice by 3 Rupees in the first five years without causing any discontent to those ryots who have already reached the 6 Rupee rate: if this proposal is accepted, in taking agreements for new channel leases for five years would have to be entered into by the ryots with 3 Rupees for the first two years, and 4, 5, and 6 Rupees for the three following years.

125. The distinction between second and third class crops is not sufficiently drawn in the rules; "tobacco" and "chillies" are included in the second class, and "field tobacco" and "field chillies" are entered in the third class; no attempt whatever at distinction is made. How are garden korra and garden raggy to be distinguished from field korra and field raggy?

126. In the Lower Division nearly all korra was charged at Rupees 2, while in the Upper Division, jedda korra, which is a seventy day crop, was charged Rupees 4; I think the charge of Rupees 4 for korra of any kind is excessive and productive of discontent, and I beg to recommend that the distinction between gardens and fields having been done away, a fresh intangible fluffy distinction between field and garden crops should not be introduced.

127. All raggy, tobacco, and chillies should, in my opinion, pay Rupees 4, and all korra should pay Rupees 2 while the rates remain as they are, and while three classes of crops are retained; it is not sufficiently clear from the rules that indigo pays only Rupees 4 no matter for how long a period water is taken; I found this was not generally known even by the Curnam.

128. The charge at monthly rates after the 31st December is very unsatisfactory in its operation; Rule V, Clauses 6 and 7 of Rule VI bear on the points, but they are not sufficiently clear; there seems to be no provision at all for irrigating paddy fields at the monthly rate unless the crop is matured from other sources.

129. The rule in its practical working has come to this, that a ryot pays at the rate of a rupee a month for the time the Curnam chooses to say he took water, e. g., in Donipaud village, Koilkuntla Taluq, water was stated to have been supplied to a field belonging to the son of the Village Reddi from the 24th January to the 23rd February for indigo, and one rupee was entered as the charge; this was not a solitary case; there were many such; I merely give it as an example.

130. I do not consider this fair; rules should not place a Curnam above the possibility of check; the subject was discussed in Board's Proceedings, No. 1,281, of the 14th May 1875; I have not seen the copies of correspondence which formed the enclosures of the Collector's letter, but an extreme case appears to have been taken with the result of securing a ruling (G.O., No. 898, of the 9th June 1875), which has been interpreted to mean that a ryot can at pleasure have a month's water from any date he chooses.

131. Applications for water at monthly rates not falling under Clause 8 of Rule VI should run from the 1st January until the canal is closed, or until the crop is cut or withers, whichever ever happens first; Mr. Latham has already ordered that the charge at monthly rates should in no case exceed the crop rate, so a ryot taking water in January, February, and March for a third class crop is now only charged 2 Rupees; the Reddi's son, who took water for indigo from the 24th January to the 23rd February, no doubt required water and almost certainly took it as long as he could get it.

132. Clause 9 is wholly inoperative, but the subject has been separately reported.

133. There is no use altering any of the subsequent rules, which have not generally been worked; ryots who cannot read and write have not given *written* notice of damage to crop to the village officers, but if the crop has been examined before removal, and there was no doubt that it withered, remission has been granted, notwithstanding the directory words that no claims shall be admitted; cultivation, when applications have not been made, has not been separately registered by the Curnams, and cultivation without application has not been shown at the foot of the register of applications with the necessary remarks; the Revenue Inspectors have not

examined the accuracy of measurements and made any necessary alterations in red or any other ink; the Carnams and Reddis have not inspected the cultivation twice a month, nor has a Revenue Inspector, with a range of 150 square miles to travel over, at once visited the scene of damage.

134. The instructions which are with the Memorandum (Enclosure A) will, I hope, secure all the results which these rules were framed to bring about; the points in which they fail can only be ascertained by experience.

135. With regard to Rule XI, I would observe that the ryots have been entirely at the mercy of the Company's servants for remission when crops withered; the Tahsildar of Sirvail appeared at the settlement for one day only as he was being transferred to Ramallakota Taluk; he brought with him a petition which had been referred to him for report, complaining of withered crop; he reported to me that the statement in the petition was true; I asked him if he had seen the crop himself and he replied in the negative for "the Overseer admitted it."

136. That word "admitted" shows the precise view the Tahsildar took of his position with regard to the Company; the question of water-rate he thought was one between the Company and the ryot with which he had no concern, but to stand by and see fair play; if the ryot and the Overseer agreed there was an end of the matter.

137. I have now described the whole system, if system it can be called, of canal management; it entails troubles, bothers, vexations, and exactions upon the ryot from beginning to end; he is at the mercy of a Carnam or Amin to record his application, and he does not himself know what he wants recording; if the area has been entered wrongly he has without notice been fined; the supply of water is often insufficient, and the ryot has to look for his remedy to a cooly on 6 Rupees a month; then at the time of measurement he has been as far as I can make out entirely without redress at the mercy of the Amin and Carnam who have been subject to no control or supervision of any kind; if his crop has withered, unless the Company's servants admitted it, he has had no chance of remission; if he has undertaken paddy cultivation expecting to pay Rupees 3, he has without any notice being given him that his lands were insufficient been charged Rupees 5 instead of Rupees 3; if an Amin on a measuring up tour in March or April, long after the crop was removed, reported that there were no bunds, and the first intimation the ryot has had of it has been the receipt of a putta or a demand for the money.

138. The system, while exposing the ryot on all sides to peculation, has been in no way calculated to secure the registration of irrigated areas; whether there has been such extensive concealment as to make an appreciable difference in the receipts is a point upon which I can offer no opinion, for between the opportunities of the Company's servants and the indolence and neglect of Government servants belief and disbelief are equally uncertain.

139. The causes already mentioned, which are all remediable, are in my view quite sufficient to account for the failure of the Company, and I can see no reason at all for doubting that after some years of judicious and fair management, the receipts will cover the working expenses.

140. The great irremediable reason why irrigation does not extend is the large amount of Regada soil among the lands commanded by the canal.

141. Jonna, which is the staple crop of Kurnool District, grows luxuriantly on these lands in ordinary seasons; as is well known the people like the grain and the cattle like the straw; it requires but little watching during its growth, and the land has only to be deeply ploughed once in four or five years; ryots will not convert their splendid jonna lands into paddy fields until it is clear to them that they will get large profits from doing so; until they understand more about wet cultivation than they do at present, I should certainly hesitate to recommend any poor ryot to undertake the experiment.

142. If one or two ryots wish to undertake paddy cultivation in a block of Regada soil, it is almost impossible for them to do so without incurring the hostility of their neighbours, for the percolation of the water from rice fields undoubtedly injures the jonna crops; so wet cultivation of Regada soil must be taken up in large blocks, and it is of course difficult to secure agreement on a question of doubtful expediency among a great number of ryots.

143. The sparseness of the population (130.4 to the square mile) is another valid reason for the ryots preferring jonna cultivation which requires less care and watching; it also necessitates fewer hamlets, and so decreases the area on which ryots prefer to grow rice, for rice crops require constant watching, and ryots like to have their rice fields as near their houses as possible.

144. There is no large local demand for rice, and so ryots naturally prefer to grow a crop which provides food for themselves and their cattle, and which entails no unprofitable and uncertain barter; the one road from Nandial to Dhoor is little, if at all, easier to travel over than the fields on either side of it; when the canal is opened for navigation, this obstacle to the extension of irrigation will disappear, and if the prices of the Cuddapah market leave an

ample margin for profit there can be no doubt that rice cultivation will gradually extend in Sirvail and Korkurich Taluks when the evils of the present system of management are removed.

145. The large bullocks of Kurnool District do not take kindly to tramping through the slosh of paddy ridges, and several pairs of ploughing cattle have died from it in Nandial and Taluk.

146. The lack of manure is another reason about which there is nothing to be said; water alone will not yield good rice crops, nor enable a ryot to double crop his land; ryots here as elsewhere put into the fire what they ought to put into the ground; it is a well known and widespread evil which nothing but time and knowledge will cure.

147. The low level of the village roads possibly prevents a little irrigation; only one village, Devayyapuram in Sirvail Taluk, assigned this reason, and the ryots said that 40 acres would be put under paddy cultivation if a road were constructed for a mile; this subject will be thoroughly investigated during the next six months, and accurate statements of the cost of raising the roads and of the increased irrigation which would follow will be prepared.

148. There were very few complaints about seedling at the last settlement, but the experience of it and the fear of it have in some measure arrested the progress of irrigation; there are no assaults throwing any light upon the subject, nor has the extent of the evil been in any way investigated; this must now be done, but the list of irrigable fields mentioned in paragraph 69 should be first supplied to enable the inquiry to be thorough and satisfactory.

149. About the general ignorance of the method of irrigated cultivation there is nothing to be said except that it exists; the 5 Rupee rate for the first year induces a number of ryots to hazard rice cultivation without measure and deep ploughing; the crop is poor, and they either abandon the experiment altogether, or else they try a fresh piece of land the following year.

150. No one can regret more than I do the meagre information of the last few paragraphs; but there are no accounts or papers throwing any light on the subject, and I do not think it is possible to obtain much accurate information about past years; investigation is now commencing, and in the future the exact extent of the operation of each of these causes will be ascertained, and I labored under great difficulties during my tour of settlement and investigation, and the office work and arrears of returns were very heavy; my Shariatdar did not join until the 18th June; it was all I could do to finish the settlement within a week of the close of the field.

151. I have reserved for the end the two important questions, (1) whether the rates should be reduced and (2) whether legislation is necessary.

152. I have in the earlier part of this report submitted my opinion that the imposition of high rates in 1885 was a fatal blunder, but there are some considerations concerning the advisability of a general reduction of rates now that an uniform rate has prevailed for thirteen years which I beg respectfully to put forward.

153. It seems to have been assumed by the Collector of Cuddapah and by the Board of Revenue that the rates are too high, and that a reduction would be followed by an extension of irrigation. I do not know the grounds upon which this opinion has been based, and therefore I approach the question as open ones. Are the rates too high? Would an extension of cultivation follow their immediate reduction?

154. I will give cases of the incidence of the canal water-rate in five villages in Cuddapah District in which irrigation is progressing; the rate in many cases has not yet reached 6 Rupees, but for the sake of comparing a 6-Rupee canal water-rate with the consolidated wet assessment, the full rate, which will eventually be reached, has been entered.

155. In Gadilar village there are 124 acres of wet land at consolidated wet rates varying from 4 Rupees to 10 Rupees which pay an average assessment of Rupees 1.6.4; the full canal irrigated by canal water for rice have an average assessment of Rupees 7.6.4. Similarly.

Village.	Number of Acres of Wet.	Average consolidated Wet Assessment.	Number of Acres of Dry Land irrigated for Rice.	Average Assessment.	Total average charge with Rupees 6 Canal Water-rate added.
		Rs. A. P.		Rs. A. P.	Rs. A. P.
Madatur	96	6 12 9	158	8 13 6	8 13 6
Naravada	34	8 2 9	53	2 5 1	8 6 1
Chayepudi	115	7 5 0	175	1 8 1	7 8 1
Palampanny	263	7 12 5	196	0 12 0	6 12 0

So in these five villages the consolidated wet assessment on about 500 acres amounts almost exactly to the combined land assessment and full water-rate on a similar extent of land.

156. In Kurnool District there is not much land under first-class sources of irrigation; 78 acres under Nagatur tank in Nandikothur Taluk pay an average assessment with Government water-rate of Rupees 7-4-0, 125 acres under Kavala tank in Nandial Taluk pay an average assessment with Government water-rate of 6 Rupees, and 613 acres under Nandial tank pay an average assessment with Government water-rate of Rupees 6-8-0; the average assessment of dry land irrigated for rice is Rupees 1-2-0, making in all with full canal water-rate Rupees 7-2-0.

157. So in Cuddapah District the canal water-rate would not appear to be unduly high in comparison with the consolidated wet assessment, while in Kurnool the rates are slightly under the Government rate in Nandikothur, and they are not quite one Rupee in excess of the average Government rate in Nandial Taluk.

158. When it is remembered that for four out of the last five years the natural supply of Nandial tank has been insufficient to bring the crops to maturity, an excess of one Rupee does not exceed the value of the more certain supply; on the other hand, however, the disproportion between the rates is greater when a second crop is raised on these tank lands.

159. The relative productiveness of the different lands has not been taken into account, because there are no data on which to form any opinion; only one-third of the lands which are cultivated at the 3-Rupee rate are kept under rice cultivation for three years, and so it may safely be assumed that the fields which are kept under rice cultivation for four years until the 6-Rupee rate is reached are those in which valuable irrigable properties have been discovered by experience.

160. So, in my opinion, the rate for rice is not too high when the supply is sure and sufficient in comparison with the Government charges for water or when the gain which accrues from rice cultivation is considered; a water-rate of 6 Rupees leaves an ample margin for profit, and I do not think the high rate has had much to do in late years with the slow extension of irrigation; the system of management and the insecurity of the supply have been the determining causes in most cases where the question of irrigation has been considered.

161. Not one single ryot from Soonkesala to Cuddapah complained of the high rates or assigned them as a reason why irrigation does not extend; it is a stock official reason which has been clung to staunchly and persistently put forward, but I do not find that it had its origin in the ryots' mind; indeed it is perfectly marvellous how utterly ignorant the ryots are of the rates, and it is doubtful whether in very many cases they have got the benefit of the reduced charge for rice; e.g., Kulli Narsi Gudoo of Jillela asked for remission for a short crop of paddy owing to excessive water; I told him he had Rupees 3 a acre to pay; before I could say another word he blurted out that he was quite satisfied, for he had expected to pay much more, as chilies were 6 Rupees an acre.

162. Similarly Seebanna of Nandial had to pay Rupees 3 an acre for paddy; he told me he had not the faintest idea what he had to pay. Whatever I pleased he would willingly pay.

163. In the case of Nandial tank I experienced the difficulty of making the ryots understand anything about charge by the acre, and they are the most intelligent of the ryots; the Deputy Collector in charge of Irrigation had erroneously ordered Inamdars to pay 6 Rupees an acre for a month and-a-half's supply, and I was very anxious to disabuse their minds on this point lest the money should be collected although the charge had been removed; at a meeting on the tank-bund at which 110 ryots were present, I repeated at least ten times that Inamdars were to pay Rupees 1-8-0 and not 6 Rupees; the Tahsildar too stated this again and again at my request, and we also explained to them fully and patiently Mr. Latham's new proposal for supplementing a tank supply.

164. The following day when Nandial was called on for settlement I proceeded to hear the lesson of the previous day, and the result was decidedly unsatisfactory. I recognized one of the most attentive of my listeners, and asked him what Inamdars had to pay for the month and-a-half's supply, "6 Rupees" was his prompt answer; in despair I turned to an Inamdar who had seemed to take a great deal of interest in the subject on the previous day and asked him how much an acre Inamdar had to pay. He smiled pleasantly and replied "we are like wild beasts. We do not know what an acre is."

165. It would appear that the backwardness and ignorance of the ryots in most of the taluks has not been considered; it is doubtful whether the general body of ryots know much about the rates, and it is equally doubtful whether any amount of talking to them, or the posting up of any number of copies of rules, will remove the general ignorance; I believe they will only discover the charges by practice.

166. It would seem easy to reach some conclusion by asking ryots who have irrigated lands and then abandoned irrigation the reason for their doing so; but a great deal of land here is let out for irrigation, and the name of the lessee and not of the Puttadar is entered in the Irrigation

Accounts. No record besides the settlement books has been kept of irrigated lands; the rise and fall of irrigation in the different villages has not been recorded and inquired into; all investigation on this point has now to commence from the very beginning.

167. So it is extremely problematical whether a reduction of the rates would lead to an extension of irrigation; much more local intelligent investigation spread over a year or two must be made before a confident opinion can be formed on the question; in Orissa the cheap rates, without protective legislation, did not induce the cultivators to apply largely for water, and I do not suppose that the stoutest holders of the theory that the present rates are deterrent would advocate their reduction to one Rupee for a rice crop, which was the attractive low rate adopted in Orissa without success until Act III of 1876 (Bengal) was passed.

168. It is questionable, too, whether the terms of the contract would admit of a speculative low rate being imposed under Clauses 13 or 15, the price to be fixed is to be "a fair charge for the water;" the word "fair" is of doubtful significance; in loose colloquial English a "fair charge" is sometimes used to mean a charge that is not inequitable or unjust, and includes even the outside price and the extreme value, but the true meaning of "fair" when applied to charge would seem to be in its sense of middling and moderate; a charge of 6 Rupees an acre is not inequitable or unjust, neither is it middling or moderate, as it is the highest price that could be charged.

169. The Company could of course under Clause 14 of the Contract reduce the rates, but it is not at all likely they will do so, for they have a firm belief, not only in the fairness of the rate, but of its beneficent operation; in Government Proceedings, Public Works Department, of the 24th March 1875, an opinion of Mr. Latham is embodied that "as a natural consequence" of having to pay a water-rate of 6 Rupees in addition to a consolidated heavy assessment of 9 Rupees, "the Chennur men are cheerful, animated, and intelligent." I do not think the reduction of the rate from 6 Rupees to 4 Rupees would cause a diminution of cheerfulness, animation, or intelligence among the villagers of Chennur; their contentment is probably due to their proximity to a market, to the valuable irrigable properties of their land, to a sufficient and sure supply of water flowing direct to their village, and to the large profits they derive which leave an ample margin to pay the water-rate, than to their intelligence having been stimulated by heavy rates; the irrigation revenue from this one village was Rupees 7,500 last fasli.

170. The reduction in the rates made in 1874 was not so encouraging in its results as to favor a hasty repetition of the experiment; the revenue was rising slowly but steadily; 35,000 Rupees in Fasli 1281 (1871-1872), 50,000 Rupees in Fasli 1282, and 66,000 Rupees in Fasli 1283, (a sum of Rupees 4,112 for this fasli has been entirely omitted from the accounts). The reduced rates for rice then came in without the cowl system, and an immediate reduction of revenue was the result, 43,000 Rupees in Fasli 1284 and 56,000 Rupees in Fasli 1285—a loss of Rupees 10,000 on the income of 1283 although 1,400 acres more were irrigated.

171. Then came the famine year, and again a chance was lost; Government offered liberal terms to ryots, rather late in the season unfortunately, and the Deputy Collector in charge of Irrigation in Kurnool applied the rules with extreme illiberality; the Company with questionable policy insisted on the imposition of fines although it was a physical impossibility for the able policy to cope with the heavy extra work in addition to their famine duties; ryots detest and abominate these fines, small though they are in amount, when they are imposed unjustly. It is impossible to estimate the evil results which have followed the wholesale imposition of fines to the amount of 6,098 Rupees in Kurnool District in Fasli 1286.

172. The Board of Revenue ordered that the water-rate should not be levied from the ryots unless a fair crop was raised, and the Collector of Kurnool decided that a three-quarter crop should be considered a fair crop; the Deputy Collector appears to have assumed that in all cases where one-half crop was entered in the accounts, a three-quarter crop must have been raised, and apparently without any inquiry of any sort, without the Tahsildar or the ryots being present, the scale of remission appears to have been blindly applied to any figures the Curnam chose to put forward.

173. I have told in paragraph 21 how the Curnams followed the Deputy Collector's camp, and the unequal incidence of the remissions can only be explained by favored Curnams having been inspired to write their accounts in accordance with the scale of remission with a knowledge that one-half was taken to mean three-quarters.

174. The impossible feat of estimating the yield of every single field was attempted with the usual result of the settlement being concluded on the principle that to him that hath shall be given; the percentage of the amount paid by Government to the gross demand for dry crops was as under—

Ramallakota	Taluk	...	...	Koilkuntla	Taluk	...	53
Nandikothur	do.	...	30	Jammulamudugu	do.	...	71
Nandial	do.	...	17	Proddatur	do.	...	58
Sirvaill	do.	...	14	Cuddapah	do.	...	68

* Inamdars got no remission in Cuddapah District.

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Ramallakota and Koilkuntla Taluks were not settled by the Deputy Collector Ramachandra Row.

175. Nandikotkur Taluk gets water first and the irrigated lands are better commanded; whatever remission was due to Nandikotkur was unquestionably due to Nandial and Sirvail, a settlement which resulted in Nandikotkur getting double the amount of remission Sirvail got must have been lamentably defective in direction.

176. The Tahsildar of Nandial tells me it was a cruel settlement for his ryots; the Conservancy Engineer of the Lower Division tells me that Sirvail was very badly treated; the Conservancy Engineer of the Upper Division tells me that the crops in Nandikotkur were indisputably better than those in Nandial, and when I specially mentioned Protakota he says that he believes the dry crops there were among the best in the division.

177. Protakota however, which is well commanded, got 46 per cent. dry crop remission; Muchumary, another rich village, thoroughly commanded, got 65 per cent. remission, while Korrapaloor got 73; although the remission was only 17 per cent. in Nandial Taluk, Nandial itself, the richest and the best commanded village, got 27 per cent.

178. The result of a settlement of this kind was unfortunate and disastrous, for it is in Nandial and Sirvail Taluks where irrigation requires tender nursing, and Sirvail is perhaps of all taluks capable of the most development; as puttas had not been issued I applied the scale ordered by the Collector to Nandial and Sirvail Taluks with the result of raising the percentage in Nandial from 17 to 25 and in Sirvail from 14 to 35.

179. In Cuddapah District I have separately reported the high charges imposed for storage water in spite of the Collector's promise to the contrary; these charges in Cuddapah, the hard settlement in Kurnool for dry crops in which I do not think faith was kept with the ryots, and the huge amount of fines imposed, produced a great amount of substantial discontent; this is highly regrettable in the first year when irrigation received a considerable impetus.

180. There was necessarily a large falling off in the amount of lands irrigated for third-class crop in the succeeding fasli, and if there were any good reason to believe that the revenue in the famine year represented crops, this fall would be a cause of serious concern; but it was unfortunate that irrigation of dry crops on an extensive scale should have been tried for the first time too late in the season in a year too when the canal was closed for a time in January.

181. The income from third-class crops will ever be variable and will depend upon the rainfall, and for the substantial revenue rice and garden crops must be looked to. It is therefore, I think, very satisfactory to find that notwithstanding the hardships and inequalities of the previous settlements, if the amount of third-class crops is excluded from the calculation, the revenue for last fasli is Rupees 1,09,000 against Rupees 1,07,000 in the famine year, and some of this increase is due to the extension of distributary channels, which was among the principal causes of increased revenue in the earlier years.

182. The income last fasli was in round figures Rupees 1,19,000, of which Rupees 67,000 was for rice, Rupees 27,000 for garden crops, Rupees 40,000 for third-class crops, Rupees 7,000 at monthly rates, Rupees 4,000 for the Kurnool town supply, Rupees 2,500 for the Nandial tank supply, Rupees 500 for double crop, and Rupees 500 for series of crops; 9,743 puttas were issued as under:—

Above 200 Rs.		Above 100 Rs.		Above 50 Rs.		Above 20 Rs.		Under 20 Rs.	
No. of Puttas.	Amount.	No. of Puttas.	Amount.	No. of Puttas.	Amount.	No. of Puttas.	Amount.	No. of Puttas.	Amount.
10	Rs. A. P. 2,474 12 1	83	Rs. A. P. 8,545 8 1	413	Rs. A. P. 27,607 8 9	1,703	Rs. A. P. 50,489 13 5	7,590	Rs. A. P. 55,493 0 11

183. I enclose a statement showing the acreage under rice and garden crops since the introduction of the progressive rates; unfortunately in previous years rice crop at the 4-Rupee rate has not been separated from the garden crops in the accounts, and so it cannot be shown how much of the fresh rice cultivation was abandoned in the second year and how much in the third.

184. The most noticeable feature in these figures is the fall when the 5-Rupee rate becomes due; of the 4,028 acres taken up in Fasli 1284 only 1,266 acres were cultivated in Fasli 1286, and of 3,079 acres taken up in Fasli 1285 only 1,032 acres were cultivated in Fasli 1287; for the one fasli in which we have an account of the 4-Rupee rice, we find 1,591 acres cultivated out of 3,132 taken up in the previous year; so as far as any conclusion can be drawn from the

operation of a few years, one-half of the land taken up newly for rice is abandoned the following year, and only one-third of it is persevered with until the third year.

185. These figures immediately suggest the idea that the 5-Rupee rate is prohibitive and deterrent; but two points must be remembered before this conclusion is accepted as sound: (1) that the first year is avowedly one of experiment, and many fields may be considered to have proved themselves deficient in irrigable properties; (2) that ryots who attempt rice cultivation without properly preparing the ground will, as long as they can ring the changes on their fields, continue to do so, and to pay Rupees 3 instead of Rupees 5.

186. I have for last fasli separated which may be called the penalised 6-Rupee paddy, i.e., paddy which has been charged at 6 Rupees because the bunds were declared insufficient; last fasli the amount of land so charged was 1,095 acres; probably nearly 2,000 acres were penalised in Fasli 1286, for after excluding the lands under Nandial and Kavala tanks, which were entirely supplied by the canal owing to the total failure of rain, upwards of 5,500 acres were charged at 6 Rupees, while the total acreage of 5 and 6-Rupee paddy lands of the previous fasli was only 3,800 acres.

187. The large increase of non-penalised 6-Rupee paddy last fasli is a most hopeful sign; the 3-Rupee paddy keeps up its average, and yet the non-penalised 6-Rupee paddy is probably nearly 3,000 acres more than the previous fasli; the whole acreage of paddy at 6 Rs. has increased three-fold in two years, being 7,410 acres in Fasli 1287 against 2,460 acres in Fasli 1285.

188. Another hopeful sign is the high rent which commanded land pays; land assessed at 12 Annas and one Rupee lets for 4 and even 5 Rupees a year when the supply of water is sure; my inquiries on this point were necessarily limited and very cautiously conducted, and I have no idea of the extent of land thus profitably let out; but there is no doubt that some land in Sirvail Taluk lets at this rate.

189. Another hopeful sign is the concentration of irrigation; altogether 180 villages are irrigated, but exactly half the revenue is derived from thirty villages (Enclosure C); in Cuddapah District it will be seen eleven villages yield Rupees 30,000, of which 90 per cent. is for first and second-class crops, and may be regarded as fairly established revenue.

190. Concentrated irrigation is far less liable to fickle fluctuations; when a considerable amount of land is taken up for paddy, the cultivation increases and goes on *crescendo*; ryots in the immediate vicinity must go with their neighbours under the irresistible persuasiveness of percolation.

191. I do not think this is the time for suggesting a reduction of the rates as the prospects of the Company never were brighter; under improved administration, and with a more tender regard for the feelings and prejudices of the ryots, with judicious and well considered extensions of distributary channels, and with increased supervision on the part of the Company's Engineers to secure a continuous sure supply of water, and with a settlement at which ryots are told what they have to pay and have an opportunity of contesting the charges, with the abolition of fines altogether perhaps, and certainly with the discontinuance of the practice of fining ryots behind their backs and without their knowledge, the present rates will have what they have not hitherto had, a fair chance.

192. If Government determine to give the present rates a chance without again pressing the matter on the notice of the Directors of the Company, I would respectfully submit that all subordinate Revenue authorities should be enjoined loyally to carry out the wishes of Government; it is worse than useless to keep on repeating when anything goes wrong that all this trouble would not have arisen if the rates had been reduced; if it can be demonstrated to the Company that a reduction of the rates could reasonably be expected to lead to an increase of revenue, no doubt they would be willing to further their own interests, but as a reduction to Rupees 4 and Rupees 2 would probably lead to an immediate loss of a quarter of a lakh of existing revenue, something more than reiterated assertion is necessary before the Company can reasonably be expected to reconsider the matter.

193. Leases for five years for the whole irrigable area of a village have been very successful in Orissa, and I think it would be wise and remunerative if inducements could be held out here to persuade ryots to take up irrigation in large blocks for a term of years; a list of commanded fields must be obtained before an arrangement could even be suggested to a village, for an inquiry would possibly disclose that water does not flow in such volume as the ryots consider sufficient to a great many fields which the Company class as commanded.

194. As the great bulk of the revenue is derivable from lands irrigated before the 31st December, and as the monthly rates which are very difficult to supervise only yielded Rupees 7,000 this year, I would throw out the suggestion that if greater liberality to the ryots is thought likely to lead to an extension of irrigation, it might take the form of extending the time in which water is supplied; leases for five years for water for the whole season at first and second-class single crop rates would, I believe, prove attractive and remunerative.

195. I would respectfully suggest a reconsideration of the point whether a half-yearly settlement is necessary; last fasli it certainly would not have been worthwhile to have had a second gathering in eight taluks for the sake of settling Rupees 7,000. Ryots would not attend merely to hear the settlement of the monthly rates; and a double issue of puttas in one fasli would be troublesome alike to officials and ryots; as it was impossible to commence the settlement last fasli until the canal was closed, all the irrigation of the fasli was settled at one time.

196. But an early settlement after December is over is very desirable, and the one settlement of the year should be in January and February; it is not clear what objection there would be to allowing the settlement of the monthly rates to lie over until the following January, when the whole irrigation of one calendar year could be settled at one time; the full amount of the demand for monthly rates could be paid to the Company monthly as realised earnings of the calendar year if it were arranged that the amount of the monthly rates should be incorporated in the gross demand of the calendar year; if, however, the restriction directing the refusal of remission for failure of water after the 31st December is removed, March would be the most convenient month for the annual settlement.

197. I fear the consequences of two settlements in one year; when it is remembered how very ignorant the ryots are, it appears possible and probable that two settlements in one year may lead in many cases to ryots paying twice over for the same crop when it has overrun the 31st December; I am sure that two settlements in one year would create a general impression that the new arrangements were accompanied somehow or other with increased charges, which involved the issue of two puttas and the collection of double payments.

198. Whether legislation is absolutely necessary or not depends in some measure upon the decision given on the point raised in my letter, No. 98, of the 9th May last. If I am right in my belief that a ryot who has applied for water, and intends to pay for it, commits no criminal offence by opening a sluice which has been closed against him, or by putting a new dam in a distributary channel, or by raising the level of a regulation dam, then in that case it is a sheer and absolute impossibility to control the distribution of water satisfactorily without an Irrigation Act.

199. I have suggested in that letter that the Revenue officer in charge of Irrigation should be authorised to impose an arbitrary price up to Rupees 25 an acre for water taken at improper times or through unauthorised channels; an injudicious use of the power to levy this heavy prohibitive water-rate might do a great deal of harm, and even if my suggestion were carried out I would fence it with the safeguard that not more than double the water-rate should be charged without the previous sanction of the Collector of the district.

200. A charge of even Rupees 25 an acre is theoretically defensible as a fair charge, when it is remembered that those constant acts of interference with the arrangements made for the distribution of water are among the principal causes of the insecurity of the supply, and Rupees 25 may be but very inadequate remuneration for the loss the Company has sustained by a single act of interference.

201. It has been suggested to us that the charge would be of doubtful legality; but if this prohibitive rate were entered in the rules, it is not clear why Rupees 25 an acre could not be collected under the provisions of Act II of 1861 as the other rates are collected; all rates would be equally beyond the jurisdiction of the Civil Courts.

202. It is however an indirect and somewhat clumsy way of supplementing the deficiencies of the existing law; these defects should, in my humble opinion, be remedied by legislation, and although the high rate can be defended as a fair charge, it is, and it is meant to be, a punitive charge for infringing rules and regulations; I proposed it in May in the hope of receiving speedy order on the subject that during the present season I might be able to stop with a firm and strong hand the lawless interference with the distribution of water which operates so prejudicially to the interests of the Company and to the extension of irrigation.

203. Some time will necessarily elapse before an Irrigation Act can be passed for this Presidency, and all the Collectors will of course have to be consulted; it may fairly be assumed that it is doubtful whether any of the Acts which are made punishable under the Bengal Irrigation Act (III of 1876) amount to mischief within the meaning of the Indian Penal Code; Sections 79, 93, 94, and 96 of this Act contain the principal provisions which need consideration; Part V on village channels might hereafter be found extremely useful as the desire for water extends, for the principle of villagers owning and keeping in repair the channels within the limits of their village is sound, and no arrangement could be more economical.

204. I am clearly of opinion that legislation is desirable and necessary.

205. I do not find any suggestions on record which I can support for improving the position of the Company; the idea of attempting to lower the price of rice on the spot, which would certainly be an odd way of inducing ryots to pay a high water-rate to cultivate paddy fields, and the suggestion that a population appreciative of the advantages of irrigation should be imported from I know not where, lie beyond the range of practical considerations; the first proposal involves an economical fallacy, the second savours of a whimsical crotchet.

206. Among the District Subordinate officials there is beyond the standing suggestion that the rates should be reduced a general bankruptcy of ideas.

207. Mr. Davidson's proposal of a compulsory payment for water whether used or not involved the startling novelty of a forced ayacut for dry crops; although the rain is ordinarily sufficient to bring them to maturity, a rate was to be imposed for water which usually was not wanted or used, and this rate was to be about double the average land assessment.

208. The financial policy of the present year has shewn this proposal of all consideration to which it might have been entitled if its injustice could have been got over; there is to be a reserve fund to meet the wants of future famines, and to this fund the ryots of Kurnool and Cuddapah Districts contribute their share; so they cannot fairly be taxed also for the maintenance of a local famine destroyer as the canal has been called.

209. I regret to have no brilliant scheme to submit, no heroic remedies to propose; as long as option about taking water is conceded to the ryots, the removal of the hindrances and obstacles which have arisen from indifferent administration is the main feature of reform; the supply of water must be sufficient and secure, and of this the officers of the Company must not be the sole judges; the area of peculation must be reduced; the ryot must look to his village officers and to the district authorities to supply his wants and to secure redress for his grievances; the canal in short must be adapted to the wants of the people whose wishes and prejudices must be respected, and to the existing institutions of the country.

210. I am deeply sensible of the imperfect character of this report, but it is an extremely difficult thing to prosecute inquiries into the working of a canal when nobody seems to know anything on the subject, and when the rise or fall of irrigation in particular villages has attracted no attention and engaged no inquiry during the last ten years.

List of Enclosures accompanying the Report.

- (A.) Memorandum (with five enclosures) explaining orders to subordinates and simple rules of instruction.
- (B.) A combined return showing the whole revenue for last fasli (1287) with the separate E returns of Cuddapah and Kurnool.
- (C.) A list of thirty villages which yield half the revenue.
- (D.) A Talukwar Statement of puttas issued for last fasli (1287).
- (E.) A statement showing the acreage under rice and garden crops since 1874 (from Fasli 1284 to 1287).
- Rice at the 4-Rupee rate was not separated from garden crops before last fasli.
- (F.) A statement showing the demand for dry crops for last Fasli (1286) with the amount paid by Government and the amount paid by the ryots.
- (G.) Sketches of two fields showing measurements that have to be made.

(Signed) A. L. LISTER, C. S.,
On Special Duty.

ENCLOSURE 2 (A). MEMORANDUM.

THE great defect in the present system of canal administration is that no accounts of irrigated land are kept from month to month, so when the time for settlement draws near, the Amin and the Curnam can arrange what the canal revenue is to be from a village, and the Curnam can then set to work to prepare accounts in pursuance of the agreement they have arrived at; it is of course possible that they fix the amount of canal revenue with reference to the actual irrigation there has been; it is equally possible that other considerations influence their decision; it will be sufficient to mention that the demand up to the 31st December for irrigation up to date was 52,000 according to the Government accounts and 76,000 according to the Company's accounts for Kurnool District, whereas the settlement demand figures up to 31st December were upwards of 97,000, to show that a considerable margin of revenue is left to be arranged after the crops have been removed and the possibility of check is slight.

2. The subordinates of the Company have had unlimited opportunities of charging water-rate for any fields they chose, and of granting remission at pleasure; they admit no overflow of channels, and their ignorance about complaints of insufficiency of water is wonderful.

3. I have never seen subordinates enjoy the unlimited confidence of their superior officers as the Company's Amins do; a great deal of what the Amins report is based upon what the

bankers say; there is no check at all upon the Amins; the Overseer sometimes goes to a village and looks at the irrigation, but the practical result of the present system is that a banker and Amin, if they agree, can get any field they choose charged, whether it was irrigated or not, and can similarly omit any field from the accounts.

4. The Conservancy Engineers implicitly believe every word these men say; it discourages them not to support them at the settlement they say. Mr. Dunphy asked what possible good it could do an Amin to charge a field which had not been irrigated; he could understand their omitting to charge fields which had been irrigated; when I showed him that the exhibition of the power to impose water-rate on unirrigated fields enabled blackmail to be levied from all the commanded lands, he could not believe his subordinates would do anything so wrong.

5. I will cite one instance of Mr. Dunphy's persistency in supporting a subordinate, which will give some idea of the little chance any ryot has had of avoiding an unjust charge imposed upon him. On the 20th May Mr. Dunphy reached Adinimayapally, whither I had preceded him by one day, and on his arrival I told him that the Tahsildar has just returned from inspecting some lands in Goodoor and found some portions of fields waste which the Amins had reported as irrigated. Mr. Dunphy remarked "I believe the Amin is right though." Mr. Dunphy was no doubt sincere, and he did believe the Amin, but it is rather hard upon ryots to have to prefer claims at the settlement before an officer of such staunch antecedent convictions.

6. I inspected the fields, and a more preposterous and unfounded claim was never put forward. One field, 6.90 acres in extent, with a large well with plenty of water in it in May had 1 acre waste, 1.11 acres cholam, 4.79 acres ragi; yet the Amin entered it all as surreptitious ragi cultivation.

7. The statement, too, was obviously false; the Amin said the ryot had diverted canal water as it passed his field to irrigate fields lower down the channel; when I asked to be shown the irrigated fields further on, it turned out that there were not any, and that no canal water had had occasion to pass this field at all; the banker said no water was taken, and that he had not told the Amin so; such conduct on the part of a Revenue Inspector would have entailed suspension or dismissal, but I do not know whether Mr. Dunphy considered the Amin had done anything very wrong.

8. In previous years the lists of surreptitious irrigation have merely been filed in the Taluk Cutcheries; no notice whatever has been taken of them and no inquiry held; so can it be doubted but that this ryot would in previous years have been charged upwards of Rupees 30 for water he did not use, for the Amin and Curnam were agreed and Mr. Dunphy was persuaded that the charge was a just one; the ryot would not have contested the charge, for he would not have known it had been imposed until he received a putta or a demand for the money; and if he had then objected, he would probably have been told that the settlement was over. The Tahsildar of Cuddapah, whose absence from ill health at the settlement I regretted, when I first saw him in March, told me that there had been much discontent in Cuddapah from unjust charges having been imposed on well lands; so the objection which the ryots have manifested in many places to the irrigation channels coming into their villages need not wholly be ascribed to prejudice or ignorance.

9. A well in the midst of commanded lands is to the Company what a red rag is to a bull; they hate the very sight of it; does it not cost more, they ask, to lift the water than the amount of our water-rate. No doubt it does cost more than 4 Rupees, or 6 Rupees to lift water for an acre of ragi or paddy, but the well supply is certain and secure. A man irrigates his field when he likes, without fighting or bribing for water, and enjoys the substantial happiness of possession; he has sunk capital in his well, and he has the bullocks and laborers standing idle, and so, though the value of their labor exceeds 4 and 6 Rupees, he does not feel it to be the same expense as paying out the money, and he does not regret having spent his money on a useless well.

10. Canal administration, like all Revenue work, must commence by proper accounts being regularly kept in the village; and these simple rules now submitted, which I should hardly dignify with the name of a Code of Instructions, are designed to secure a monthly record being kept of the points which should be reported while there is a possibility of testing their truth; the Collectors of Cuddapah and Kurnool have approved of them; the Acting Chief Engineer and Manager finds them all that he wants and a little more.

11. It is necessary that an Irrigation Masavari showing the fields actually irrigated should be written up monthly. At first I thought it would have been sufficient to enter the irrigated area in the source of Irrigation Column in Village Account No. 1, but though this would have answered for a great majority of cases, there would have been a difficulty about the fields which were not irrigated in the same month they were sown; I have therefore directed an Irrigation Masavari to be kept, and stamped and paged books with printed headings have been supplied to all the villages.

12. This account will only be useful if it is written punctually, and so in the instructions to Tahsildars and Revenue Inspectors they have been directed, on the occasion of every visit to a village, to write their names with the date under the last entry; this is a double check, for if the Revenue Inspector misses a village in a month, he cannot get his name in; their usual practice of writing in the margin is quite useless, for they can on one day make three or four marginal entries with different dates.

13. The first 17 Columns of the monthly report merely contain the abstract of the application register which has at present to be sent; Column 18 to show the total of the actual irrigation according to the Irrigation Masavari's entries; if Curnams and Tahsildars will only do what I tell them, I have no doubt of being able to secure such an effective system of registration as will satisfy the Company; and this is a great object to be attained, for I regard the removal of the double measurements and double supervision and double settlement as a first necessary step to success; the Revenue supervision must be such as to satisfy the Company and to preserve the ryot from extortion.

14. Column 19 is necessary that surreptitious irrigation may be reported at the time when the ryot has a chance of disproving it, and when superior officers by inspection can satisfy themselves of the truth of the charge.

15. Column 20 is necessary to prevent the present excuse for not reporting surreptitious irrigation, if any is now detected; the village officers can say that they noticed it, but regarded it as subsoil leakage; the cases irrigated by overflow of channels must be reported for the ryot's protection. Mr. Wilks regrets that I have thought it necessary to call for this information.

16. Column 21 is necessary to show us where to look for the real thieves—men who get water while the village influence is exerted to save them from the water-rate; we shall see on the maps if these crops, which at some time or other usually want more water than the rainfall, are so situated with regard to our irrigated fields as to be easily supplied; these crops must be looked after as the Police watch the movements of their suspected characters.

17. When Mr. Wilks first saw the form of monthly report he told me that there would be hundreds of complaints under Column 22 about fields to which water does not flow properly; this of course is precisely what is wanted, for groundless complaints soon cease under effective administration; if they are reasonable complaints, the more there are the better. Mr. Wilks' statement more than ever convinced me that insecurity about the supply of water is one of the principal reasons why irrigation does not extend.

18. Column 23 is useful to show the lands which would be irrigated if there were sufficient channels in proper order; it is also necessary to do away with a great settlement irregularity of the Curnam and Amin saying water has not been taken, and of the applicant being allowed to withdraw his application; his position is a proud one; all through the irrigating season, if a superior officer want to check the irrigation, he has an application duly recorded; at settlement he avoids payment if a couple of men, whose word there is no means of checking, say he did not take water.

19. Columns 24, 25, and 26 secure withered crop being reported in the month it withers. Columns 27 and 28 are necessary to make the village officers inspect the fields and to report deficient bunding at the time, so that the Revenue Inspector can check it, and not merely to echo what the Amin says at the settlement.

20. Am I expecting too much from Curnams? I think not; indeed, they all owned, after the many addresses I have delivered to them, that there is not much additional work for a Curnam who really does his regular work; but for those—and they are many—who have systematically neglected their ordinary Revenue work, who have never written the ordinary Masavari, and who merely flock to the Taluk Cutchery before the Jamabundy to cook up some sort of accounts from the previous years' figures obligingly supplied to them by a Taluk Gumastah, the introduction of those simple rules means an entire revolution in their official lives; their figures for the future are to have reference to the crops on the ground, and their accounts are to form the basis of the irrigation demand; they are to supply the accounts of the extent irrigated instead of wandering through their own village at the heels of an Amin, and weekly certifying to the correctness of measurements which some of them do not understand.

21. I believe that the Curnams will eventually like it; all men whose work is of any value like power; the emancipation of the village officers from the thralldom of a class of men like the Irrigation Amins will do a great deal to remove the unpopularity of the canal; and the removal, which I hope these simple rules and constant supervision will effect, of the power of the Amins to charge a ryot who has not taken water will make the general body of ryots regard irrigation with less fear and distrust.

22. I have not made any mention of the provision of Rule XVI, requiring inspection to be made twice a month; this has never yet been done, and it does not seem necessary to lay down how the Curnams are to discover the irrigation, for if they bring it all to account it does not in the least matter how they acquire the information; in a village where there is much irrigation

there are scores of fields about which there is no dispute; and if these fields are entered in the account and ryots do not complain of insufficiency of water, or bring forward any other dispute, no good is gained by going to look at them before measurement. Curnams know well enough the fields which will be the subject of dispute.

23. There is, too, an objection to rules whose enforcement is impossible; it is possible to discover if all the information which is supplied under these rules is correct or not, but it is impossible to make the Curnam and Roddy go along the irrigation channels twice a month unless somebody goes to the village to see them do it.

24. It is essential to success that the Tahsildars should actively and intelligently supervise the proceedings of the Revenue Inspectors, or else the Revenue Inspectors will drift towards the position from which it is desirable to oust the Company's Amins; it is extremely doubtful whether an outsider in a subordinate position, without power or patronage, will be able to get any real work of value out of the Tahsildars. During the whole of my service I have never known a Tahsildar *proprio motu* discover and report any shortcoming or fault of a Revenue Inspector; and unless the Collectors insist upon their working now, I shall be powerless in the matter. I am not one of those who think that a Tahsildar is a hardworked man; a multiplicity of accounts and orders pass through a taluk office under their signatures, and some of them have a great deal too much magisterial work to do, but as a rule they do very little Revenue work; they make very brief and rapid tours when they leave the subah station, and they accept without inquiry every report a Revenue Inspector puts before them.

25. I have supplied the Curnams with forms to report their departure from and return to their village to me; it is hoped this will in some measure put a stop to the long detentions at the Taluk Cutcherry they have to undergo.

KURNOOL,
15th August 1878.

(Signed) A. L. LISTER, C.S.
On Special Duty.

Enclosures to Memorandum.

Copy of Instructions to Tahsildars.
Do. do. to Revenue Inspectors.
Do. do. to Curnams.
Do. do. to Irrigation Masavari.
Do. do. to Monthly Village Report.

ENCLOSURE No. 3.

INSTRUCTIONS TO TAHSILDARS.

You will submit to me on the 5th of each month a short diary (in English if convenient) showing the irrigation villages visited by you during the previous month; with this you will enclose the Revenue Inspector's diaries and the monthly reports, in original, from all the irrigation villages in your taluk, with the usual B and C Abstract Statement.

2. On visiting each village you will write your name with the date underneath the last entry, in the Irrigation Masavari and in Village Accounts Nos. 1 and 10; you must not write this in the margin, but in the middle of the page; this secures detection if these accounts are not written up to date.

3. You will always examine the Irrigation Masavari, see if the details of irrigated land correspond with the total entered in the abstract, have several portions of fields irrigated pointed out to you, and see if the water has flowed over the whole field or only over the portion said to have been irrigated.

4. You should inspect some fields of new paddy and make an entry in the Curnam's monthly report as to whether each field is properly bunded or not.

5. You should inquire from ryots other than village officers into the reasons why irrigation does not extend; if the fear of swamping the village roads is a cause, find out how much land would be taken up in four years' time at progressive rates of 3, 4, 5, and 6 Rupees, if the roads were raised, and give a rough estimate of the cost of the work.

6. If the fear of the water-supply being insufficient is alleged as a reason, endeavour to discover whether there are sufficient grounds for doubting the sufficiency of the supply.

7. Inquire whether the villagers would prefer the distribution of water to fields to be left entirely in the hands of the Village Roddy and the Nigudti.

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16

8. Have it tom-tomed through the village that you are ready to explain to any ryot the amount of land which the Curnam has entered in the application book, and make a note in the B register against each application which you explain.

9. You should personally see a few fields of withered crop, to check the Revenue Inspectors, and ascertain whether sound lands become fertile after two or three years' flooding.

10. Your experience will no doubt suggest to you other directions in which to make inquiries to ascertain the reasons why irrigation does not extend. I want to know what the ryots wish, and what they dislike in the present system; general observations are of no use for practical purposes; the wants and wishes of every village must be arrived at; you must be careful in prosecuting these inquiries not to make suggestions which may possibly tend to form the opinion which you will afterwards report you found existing there.

11. Lastly, I wish your visits to irrigation villages to act as a real and substantial check upon the Revenue Inspectors and Curnams; a short time judiciously spent in intelligent and effective inquiry will not fail to secure results; issuing orders is not of the least use unless you see that they are carried out.

12. There will be very little Cutcherry work in connection with irrigation matters. What I want is supervision over the Revenue Inspectors and Curnams in the fields, so as to secure true returns being sent in from the villages of the irrigated areas.

13. Application has been made for additional Revenue Inspectors, but sanction for their employment has not yet been received; until they are appointed the present Revenue Inspectors must exercise as much supervision as they can invariably on every visit to a village, looking at the Irrigation Masavari and writing their name under the last entry as laid down in paragraph 2 of this order; to this point I attach the greatest importance, as it was clear at this last water-rate settlement that in most villages accounts had been hurriedly prepared at the last moment for the creation of settlement figures.

(Signed) A. L. LISTER, C.S.
On Special Duty.

ENCLOSURE No. 4.

INSTRUCTIONS TO SPECIAL REVENUE INSPECTORS.

EVERY village in your range with an irrigation beriz of 500 Rupees must be visited at least once a month; every other village once in six weeks.

2. You will on each visit write your name with the date, not in the margin but in the middle of the page, under the last entry in the Irrigation Masavari and in Village Accounts Nos. 1 and 10.

3. You will see if the details of the irrigated land in the Irrigation Masavari and of applications in the B register give the totals entered in the monthly report.

4. You will examine all fields reported to have withered, entering the result of your inspection of each field against that field in the Curnam's office copy of the monthly report; in every case where you write anything in a village account book you will always put the date.

5. You will initial every erasure and interlineation in the village accounts you examine.

6. You will check every entry in the previous monthly report, writing simply "Yes" or "No" against the Curnam's entry, according as you find it correct or not.

7. You will measure many portions of fields irrigated, entering the measurement against the field in the Irrigation Masavari.

8. You will cause your arrival in the village to be made known, and you will explain to as many ryots as come to ask the amount for which their applications have been recorded in the B register.

9. When you measure fields or inspect them to see if they are irrigated in doubtful cases, you should tell the Kuttubali to give notice to the ryots concerned that they may be present if they choose.

10. You should give ryots all information about the rates and the rules for remission, taking especial care to let every one know that the withered crop must be left on the ground for inspection.

11. You will send every month to the Irrigation Overseer a list of all irrigated fields entered by the Curnam as having withered in his monthly report.

12. Report upon the roads; say if they are swamped in consequence of wet irrigation, and whether the fear of the roads being swamped prevents ryots undertaking paddy cultivation. I do not want general remarks; give the length of road swamped, or of road which they fear would be swamped, with a rough estimate for raising the road, and the extension of irrigation which would probably follow the improvement; this must not be a guess, but a carefully-prepared statement of the extent of land ryots undertake to irrigate with first or second class crop, if the roadway is raised.

13. You will endeavour to ascertain in each village any objection the ryots have to the present system of irrigation, and any causes which retard the spread of irrigation.

14. See if the distribution channels are sufficient for a village, especially in those villages where there is a desire for water.

15. All cases of raising dams and of improper interference with water will be carefully inquired into and reported.

16. On the 2nd of each month you will submit your diary to the Tahsildar in the accompanying form.

Diary of _____ Special Revenue Inspector of _____ Taluk, _____ District.

Month.	Date.	Station.	Particulars of Work done.	Remarks.

(Signed) A. L. LISTER,
On Special Duty.

INSTRUCTIONS TO CURNAM.

You will receive a book to be used as an Irrigation Masavari, which must be regularly and punctually written, and a total must be made on the 28th of each month.

2. You will receive a form of monthly report to be despatched to the Taluk Cutcherry on the 28th of each month; this must be written carefully and legibly, as it has to come on to me in original.

3. In all columns where lists of fields are called for you must give the survey number of each field.

4. In the Irrigation Masavari Column 4 is for the approximative extent of portions of fields, as I wish to save you the trouble of measuring these every month; Column 7 is for the exact measurement which, in the case of all crops reaped before December, must be filled up at the time of harvest; for other crops accurate measurement must be made in December.

5. In December the Irrigation Chittah, in the form which will be supplied you, must be written up; this must be completed in December, as the next settlement will be in January.

6. You and the Reddy will warn ryots that no crops on irrigated lands for which remission is claimed can be removed before inspection by a Revenue Inspector.

7. You will show your Irrigation Masavari and the monthly report to the Company's servants whenever they want to look at them.

8. You must not in any village account or irrigation book scratch out any figure with a pen-knife, or smudge it over with ink so as to hide it, but corrections must be made by drawing a line through the figures to be cancelled, and entering the right figures immediately above them, in this way 3-25, so that the cancelled figures can be read.

9. Applications from Amins will have the Amin's number above a line and the Curnam's consecutive number below, thus: ⁵ Amin's number, ₃₆ Curnam's number, but you need not write the words "Amin's number" and "Curnam's number"; merely write 36.

10. Collections must be shown in the ordinary Village Accounts Nos. 10 and 11, a canal water-rate column being opened in Account No. 11 with two sub-heads in this form:—

Irrigation Canal Charges.

Water-rate.			Penalty.			Remarks.
RS.	A.	P.	RS.	A.	P.	

Irrigation remittances must, as hitherto, be shown in Irrahamah, Village Account No. 12.

(Signed) A. L. LISTER, C.S.,
On Special Duty.

ENCLOSURES Nos. 5 to 14.—Statements.

ENCLOSURE No. 15.—Sketch.

Read also endorsement of Collector of Cuddapah, dated 23rd September 1878, No. 635 submitting copy of Mr. Lister's report above recorded with enclosures.

From C. S. CROLE, Esq., Acting Collector of Kurnool, to C. A. GALTON, Esq., Acting Secretary to the Board of Revenue, dated 28th November 1878, No. 478.

I HAVE the honor to enclose, for the orders of Government, copy of a letter received from Mr. Lister, Special Sub-Collector in charge of Irrigation, in which he again submits for the consideration of Government his opinion that canal irrigation cannot be controlled without the aid of legislation.

2. My opinion on this subject has already been expressed in my letter embodied in G.O., dated 11th September 1878, No. 1,485, and the marginally-noted letter Dated 7th September 1878, No. 331. to the Board of Revenue, on which no orders have yet been passed, and I see no reason to change it.

3. I cannot concur with Mr. Lister in thinking that the case of the Chabole ryots put forward by him was one which any Tahsildar could not speedily set right. The experience of every officer who has had anything to do with the Revenue administration of the country must show that there is no duty which a Tahsildar can perform with greater ease and expedition than the settlement of a water dispute. When districts like Godavari, Kistna, and Tanjore, where irrigation exists on a scale infinitely larger than is likely to be ever attained under this canal, are managed without recourse to special legislation, it would reflect little credit on the Revenue Officers concerned if they were really unable to manage the Kurnool Canal without it.

ENCLOSURE No. 1.

From A. L. LISTER, Esq., C.S., on Special Duty, Kurnool and Cuddapah, to C. S. CROLE, Esq., Acting Collector of Kurnool, dated Chennai, 21st November 1878, No. 451.

I HAD the honor to receive last month a letter from Mr. Latham on the subject of G.O. of the 11th September, No. 1,485, from which I enclose an extract for submission to Government, as it seems to show conclusively the necessity for legislation.

2. I would invite especial attention to Mr. Latham's statement that "at present rice is not a secure crop in case of failure of rain."

3. Government state in this order "that the ryots when taking water without paying for it are defrauding Government, who have to pay for it to the Company."

4. There is some misapprehension here; Government never pay the Company for water taken surreptitiously; if a ryot is caught taking water surreptitiously, he pays for it and he is fined; if he is not caught, nobody pays for the water, and the Company and not Government are defrauded of its price.

5. From the commencement of the canal operations until the present day there has been one unbroken contest between the ryots and the Company; how could it be otherwise when the Company are paid on the irrigated acreage? The Company only secured their revenue by proving that land was irrigated, and so every disputed question was a contest between a ryot and the Company: was a particular field irrigated or not was the general point at issue, and the amount of the ryot's liability depended upon the decision; while this remains the case, the idea of a contest between the ryots and the Company will, I fear, never vanish.

6. Mr. Latham in this letter successfully disposes of the Deputy Collector's statement that there was a large quantity of water running to waste into the Kunder; the under sluices in the Pennar were closed and the tail sluice at Cuddapah was only three inches open, supplying irrigation; so not a drop of water was being wasted in December 1876; the Deputy Collector evidently forgot that the water which flowed into the Kunder was not wasted, but picked up again at Rajolie.

7. Mr. Latham also satisfactorily accounts for sufficient water not flowing down the Harivaram Channel; this was merely a pioneer channel, of greater length than usual, and so late as the 25th October 1876, when Mr. Latham himself was at Kristipad, the ryots declined to enter into engagements to take water for that year in sufficient numbers to justify the necessary outlay for converting the pioneer channel into a permanent one.

8. Voppaloor could not get water at a moment's notice, but no blame is attributable to any one for this; Voppaloor is nine miles from the canal sluice, and the modest demand of this village for water was in Fash 1282 for canies 0.52, in Fash 1283 for one acre, in Fash 1284 for no extent, and in Fash 1285 for six acres; when the ryots suddenly wanted water in the famine year, the Revenue village required and took all that the distributary channel carried.

9. I regret that, owing to the introduction of the extraordinary circumstances of an exceptional year in particular villages, which from their own inaction had no right to expect water to be available, attention should have been diverted from the general question, which refers to thoroughly commanded villages in ordinary times.

10. The evil, which is one of considerable magnitude, remains without a remedy: what is to be done, for instance, now if the supply to Chabole, where rice cultivation is being persevered with, is again cut off by the ryots of Tummaloor. I fear the rice crops of Chabole would wither long before the Tahsildar's influence effected the removal of the obstructing dam.

(True Copy.)

(Signed) C. S. CROLE,
Acting Collector.

Extract from Mr. Latham's letter, No. 31, dated October 1878.

"The object you have in view of making the supply of water secure to the field of any ryot who properly applies for wet or garden irrigation, so long as water flows in the canal, is of great importance. At present rice is not a secure crop in case of failure of rain. The very construction of the canal is due to a belief that it would afford a secure cultivation independent of rain-fall. Hence the object of the canal is still unattained, and that from no fault of the Canal or of the Magistrate. It is not neglect, but inability which has crippled the action of both. When I saw (2nd November 1876) the poor ryots of Chabole (Dangavaram Village N. 15. 1.), who, with exceptional enterprise and with full trust in the Canal Officers, had duly applied for first-class irrigation and sown their rice crop, they were in a pitiable state. There was superabundant water running from the canal sluices in the 67th mile and down the first three miles of their channel; but there, two miles above Chabole, the Tahsildar's authorities had put a strong dam right across the channel, and were diverting the whole of the water to unsown dry land for which they had not applied. This day's cracked land requires to prepare it for the plough, enough water to keep rice fully irrigated (on equal areas) for fifteen or sixteen days; and as there were hundreds of acres of it, there was no chance of Chabole getting a drop of water for five or six weeks. The poor villagers, turning from the sight of their yellow withered rice crop amid their other fields, also dry and bare, and of their empty houses, would hopelessly contemplate the full supply of water for which they had applied and been registered before sowing their rice as it flowed past to Tummaloor. Unquestionably they had a right to that water, though not a legal right."

• No dry?

(True Extract.)

(Signed) A. L. LISTER, C.S.,
On Special Duty.

(True Copy.)

(Signed) C. S. CROLE,
Acting Collector.

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Submitted for the orders of Government.

2. Shortly after the receipt of the first of the foregoing letters forwarding Mr. Lister's report on the Madras Irrigation Company's Canal, the Irrigation Committee under the Famine Commission was appointed, and as it was understood that the financial position of the Company, the obstacles to the success of the enterprise, and the measures to be adopted to improve the management, were to be locally investigated by the Members of that Committee, the Board deemed it advisable to await the result of that inquiry before recording their own views on Mr. Lister's proposals. Although they have not been furnished officially with the Committee's report, they have perused a copy belonging to the First Member, who is also a Member of the Famine Commission, in which Mr. Lister's report is reviewed and the remedial measures proposed by him are considered. The Committee are on the whole agreed with Mr. Lister as to the causes which have combined to prevent the enterprise succeeding as similar undertakings have done in other parts of the country, and so far as it is practicable to remove the obstacles to success they generally endorse his recommendations, as do also the Board. These are principally the appointment of a responsible officer to be in special charge of the irrigation permanently and the revenue derivable therefrom as soon as the water is delivered at the sluice, the abolition of applications for water, the charge being made on the irrigated area, the measurements being conducted by the Revenue Officers of Government. The recent appointment of Deputy Curnams and Revenue Inspectors affords every facility for the latter arrangements being carried out. As regards the permanent location of an officer to discharge the duties now performed by the Special Sub-Collector, the Board consider such a measure desirable, but if the basis of the contract be strictly adhered to, viz., the responsibility of the ryot to Government alone and of the Government alone to the Company, they do not think his duties need be restricted to canal administration. An additional Revenue Officer is required for Kurnool, and although in charge of the canal irrigation would be specially under him both in that district and in Cuddapah, he would, as soon as the system got into working order, be able to undertake the ordinary duties of a Sub-Collector. The case would of course be altered if take the recommendation of the Irrigation Committee in paragraphs 40, 41, and 42 of their report be adopted, and the Board are not prepared to say that such a measure might not be advantageous until irrigation became more developed.

3. As regards the necessity for legislation urged by Mr. Lister, the Board do not share his views if, as is contemplated, the dual administration at present in force is done away with. It seems absurd to legislate to prevent the surreptitious use of water when it is most difficult to get the ryots to take it at all. If legislation is necessary here *a fortiori* it must be required in the deltaic tracts in the north and south of the Presidency, where every drop of water is scrambled for and fought over, and yet it has been found possible to do without it there.

4. The Board do not think they are called upon or that this is the proper occasion to notice the proposals conveyed in paragraphs 21 and 22 of Mr. Crole's letter covering Mr. Lister's report. The subject is one of grave import, and will soon have to be dealt with in communication with the representatives of the Company by the Secretary of State, and any haphazard proposals made without due knowledge of the views of the contracting parties would be as useless as they would be out of place in considering how the administration of the canal irrigation can be improved at the present time, whilst the Company is still in active exercise of its functions.

5. Mr. Lister is requested to submit a draft of the rules amended as proposed by him, with a view to the sanction of Government being obtained for carrying out the alterations at once.

(True Copies and Extract.)

Acting Secretary.

To the Secretary to Government, Revenue Department,
with eleven original enclosures to be returned.

" Collector of Cuddapah, with fifteen original enclosures returned.
" " of Kurnool.
Copy to the Special Sub-Collector, Cuddapah and Kurnool.

Ed. A. F. Goodall.

Madras Irrigation Company's Canal — in Cuddapah and Kurnool Districts. — Submitting for Government report from Special Sub-Collector for Irrigation on the —, and stating Board's views as regards the necessity for legislation urged by that officer and the permanent appointment of a responsible officer to be in special charge of irrigation.

20-4-1879
MAY 1879.

PROCEEDINGS, 21ST MAY 1879, No. 1,370.

Received

Printed 29th.

Dated May 21st.

THE SECRETARY TO GOVT.,
REVENUE DEPARTMENT.

MADRAS.

Board of Revenue,

1879. 20-4-1879.

Minutes 1879 Delta

No. 1,370.
PROCEEDINGS OF THE BOARD OF REVENUE, dated 6th June 1879.

Read the following paper from the Collector of Kurnool, dated 1st June 1879.

I. No application for water is necessary; water can be turned on to any field irrigable from an existing minor channel, but no ryot without permission can cut the bank of a main distributary channel.

II. Water-rate will be charged for an extent of one acre and not for less except when the whole field is less than an acre or when a ryot holds a separate putta for a smaller portion of a field; the charge will be by the quarter acre for areas in excess of an acre, with an allowance of five cents in measurement.

III. When mixed crops are raised the charge for the most highly-rated crop will be imposed for one acre.

IV. One rupee will be a minimum charge for any separate patch of irrigation.

V. Water-rate will not be charged unless sufficient water is supplied to mature the crop.

VI. The full rate per acre charged for water will be as follows:—

CLAUSE 1—*First-class Crops*.—Rice, first crop, Rs. 6 and rice, second crop, Rs. 6.

The charge for sugar-cane, betel leaves, coconuts, plantains, saffron and fruit trees is Rs. 6 for water up to 31st December and Rs. 1-8-0 a-month afterwards while water is available; the charge in no case to exceed Rs. 12 an acre and only the exact extent irrigated to be charged.

CLAUSE 2.—For the first year of rice cultivation on fields properly levelled and securely bunded, the charge will be Rs. 3 an acre; thereafter the charge will be Rs. 6 an acre unless a ryot signs a cowle to take water for four consecutive years, in which case for the second year of rice cultivation (which will be the first year of his cowle) he will again pay Rs. 3, for the second year of the cowle the charge will be Rs. 4, for the third year Rs. 5, and for the fourth year Rs. 6. Subsequently the charge will never be less than Rs. 6 for rice cultivation on this land.

CLAUSE 3—*Second-class Crops* Rs. 4.—Ragi, onions, chillies, sweet potatoes, tobacco, maize, indigo, brinjals, yava (wheat).

CLAUSE 4—*Third-class Crops* Rs. 2.—Cholum, korra, cotton, gram (various), oil-seeds.

CLAUSE 5.—The charge for indigo is Rs. 4 for water for the whole season from the opening to the closing of the canal.

CLAUSES 6 TO 13 remain unaltered.

VII. A ryot who has turned water on to his field and who is compelled by sickness, loss of cattle or other causes beyond his control to give up cultivating it, may be charged only for the time he took water at Rs. 1-8-0 a-month for first-class crops and one rupee a-month for other crops.

VIII. Remission of water-rate either wholly or in part will be granted for failure of crops in cases where that failure is caused by excess or deficiency of water due to defect of works and shortcomings on the part of the canal administration, and not to neglect on the part of the ryots.

IX and X.—Remain unaltered.

XI. No claims to remission will be admitted unless immediate notice of failure is given to the Curnam, who will at once report it to the Tahsildar and to the Company's Overseer.

XII. The accounts of irrigation which are kept by the Curnams will at all times be open to inspection by the Company's officers; and on the 10th of each month the Collector must forward to the Manager of the Company a statement showing the irrigation recorded in each village for the previous month.

XIII. Present Rule XIX.

XIV. Notice of the time and place of settlement of each village shall be tom-tomed through the village at least ten days before the date fixed.

XV. With a view to facilitate the transaction of the Company's business, one anna in the rupee of the adjusted gross demand will be paid by the Company to the Curnam and Reddi of the village in remuneration for their trouble in such proportion as the Collector may determine.

PEAPALLY,
1st June 1879.

(Signed) A. L. LISTER,
Acting Collector.

The foregoing draft of amended canal rules furnished by Mr. Lister semi-officially will be submitted to Government with reference to paragraph 5, Board's Proceedings, dated 21st May 1879, No. 1,370. They embody Mr. Lister's suggestions, and the Board think that sanction should be accorded at once to admit of their being brought into operation during the next cultivation season.

(A true Copy and Extract.)

W. J. Lewis
Acting Secretary.

To the Secretary to Government, Revenue Department.

Copy to the Collector of Cuddapah.

of Kurnool.

" " Special Sub-Collector, Cuddapah and Kurnool.

Ed. W. J. Lewis.

Ed. No. 4423 & 5000 9/29

564/20

30th of May 21st 1879. No. 1370
do do June 6th 1879 No. 1569

Forwards.

Whether the proposed
new rules drawn up by
Mr. Lister may be approved.
They have the advantage of
being very liberal in the
amounts now in force.
Rule 12 will be difficult
to set up to - the days being
but a short time for the
acts of the village
to pass through the taluk
office & reach the collector
to be verified & compiled in
his office - but if the same
can be done it can be
done.

These would be used as
part of the in the R. & D.
order the abolition of the
Special R. & D. Office on
the Canal - His view
has been the question of
the rules have submitted for

I have gone through these
illustrations papers have
been over with a view to
seeing my clear idea
of Mr. Lister's theory of
disposal beyond the
fact that the R. & D. Office
the existing system of
Application to the R. & D.
Office for water & then
required - that the
Demand should be based
on the amount of the irrigated
area conducted by the
Officials. I cannot
find whether or no the
Govt agent has assented
to the changes - but on
the theory that the C. has

Received 1880 1879
No. 34231

1879.

Board of Revenue,
MADRAS.

THE SECRETARY TO GOVT.
REVENUE DEPARTMENT

Dated June 6th.

Printed

Received 1879 1879

RECORDING, 6th JUNE 1879, No. 1569.

JUNE.
No. 1569.

Canal Rules - Submitting to Government
draft of amended - furnished by Mr. A. L.
& Lister.

Back up 1879

1879 1879

the matter of fort, but
if the transfer of the Canal
to fort is contemplated
or imminent (as the fact
that the S. & State has
been legal measures to
prevent, National C.
issuing any more
mortgage interest was given
to form such a
probability) then the
division of the present
question might lie over
like the Canal & fort.
proposed alterations still further
to be made or changed.

24/6/27

and direct relations to
reclaiming the right.
but that the fort claim is
wholly right & that the

Government must itself
be demand on the right.

I don't think that such
a plan can be demand
indispensable. altho the
existing relations add to
the convenience of
the fort agent. I don't know.

how, though I suspect
from the above theory &
reasons that the fort
claim is on the right.

only - that Govt. in its own
is ready for the fort claim
it implies no responsibility
on Govt. to satisfy the
fort claim. I don't agree

in this view myself. but
I cannot understand it.

46/21

Agreement to Washington
the security of the
P. a registered application for
water. In fact, it is a

but in all this act
being. there can be no
question that it is a
proposal in which a
radical change of system
of an experimental
nature is proposed but
don't feel for official
effect. I am decidedly
opposed to the
present position of
affairs between the
S. & P. & the C. & the
impendings possibilities
of absolute loss for
the whole purpose of
the C. & P. - we
are absolutely barred
from introducing
material changes in

The existing system of
obtaining W.P. looks
of Enriching this class.

The ground of H. A. Lester's
 proposals is recognition
 of direct responsibility
 of Genl. to Co. for long
 the am. due for
 living: altogether indicative
 of the dyot who receive the
 orig. - but the Com.
 districts not insisted on
 this view but have practically
 acquiesced to direct responsibility
 of the dyot by assenting
 to the rules. This acquiescence
 is satisfaction of this claim.
 The am. has been on the annual
 letter head & Genl. to the
 dyot supplied by the appt. as
 directed by the Regt. Equally
 assent to a letter head
 or mensur. spirit? prospectus
 of applics. for better being
 be doubtless but in

Proposed New Water
retention for the
Drainage Co's
Canal

any case this movement is
in the large class of
identical. And this movement
is the movement of the
whole body, as a whole,
in the large class of
identical. And this movement
is the movement of the
whole body, as a whole,
in the large class of
identical.

C 254-79
R 10/2/79 - R 17/5/80
C 254-79
R 10/2/79 - R 17/5/80

Dr. J. A. B. 18-14

Revenue Department.

No. 564.

PROCEEDINGS of the MADRAS GOVERNMENT.

Under date the 20th May 1880.

Read the following *Journal*

1. Proceedings of the
Board of Revenue,
dated 2nd May 1879,
&c. 1870.
2. Proceedings of
— ~~the~~ — dated 4th
June 1879, ~ 1870

Regarding report
from Special Sub
Collectors for Irrigation
on the Madrid
Irrigation. Com. says
canal bad. the draft
of amended Canal
Rules.

The proposals
which Mr. Lister
^{has} brought forward
in the papers read
above involved a
radical change
of system of an
experimental
nature and of some
rather doubtful
financial

financial effect.
2. ~~The Government~~
a ~~well~~ ~~decided~~ ~~by~~ of
opinion that in
the present position
of affairs between
the Secretary of State
and the Irrigation
and Canal Com-
pany, it is in-
expedient to
introduce ^{any} ~~any~~ ~~any~~
material changes in
the existing system
of utilizing the
Company's works
and realizing
their due value.

3. ~~The Government~~
the ~~Government~~ ~~in~~
Council resolved
to take no action
at present, and
the further consi-
deration of the
subject ^{might} ~~will~~ be
postponed.

Ylth

20th Decr 1904
21.02.1905

File

150

Draft G.O.

Proposed National
Map for the Information
Company's Campaign

Print

2000

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Revenue Department

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