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Government of Madras.

Financial DEPARTMENT.

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Proceedings of the Madras Government, Financial Department,
15th November 1866.

No. 50. Read the following Proceedings of Government in the Public Works Department, dated 25th October 1866, No. 3409.

Transferring the charge of the Petty Irrigation Works in the Vizagapatam District to the Revenue Department. } (Vide Proceedings, Public Works Department, dated 25th October 1866, Nos. 601 & 602.)

No. 51. ORDER THEREON, 15th November 1866, No. 428.

To be recorded.

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

Exd. J. Tulloch.

Proceedings of the Madras Government, Public Works Department, 25th October 1866.

No. 601. Read the following Proceedings of the Board of Revenue, dated 8th October 1866, No. 7,216.

Read the following letters :—

From the Collector of Vizagapatam, to the Secretary to the Board of Revenue, dated 26th May 1866, No. 414.

1. On the 16th April last, the Superintending Engineer, 1st Division, informed me that he had been called upon by Government to furnish them with lists of any large irrigation schemes which, "though promising to be greatly beneficial, have, in the absence of money, been held in abeyance," it being anticipated that the ordinary annual assignments for irrigation works in the Presidency would be largely supplemented.

2. We have but two small Government Táluqs in this District, and they are within the charge of the Principal Assistant. Mr. Boswell accordingly furnished a report on them, (No. 82, of the 14th May,) which I forwarded, in original, to the Superintending Engineer with my letter, No. 398, of 17th idem. I at the same time informed Mr. Boswell that I would send copies to the Board of Revenue, on his supplying transcript of his report.

3. This he has now done with a covering letter, No. 87, of 23rd May instant, which is submitted, in original; the object of laying these papers before the Board being, as Mr. Boswell puts it, "to pave the way for the estimates," which it is hoped will follow. The projects are fully described in Mr. Boswell's letter and summed up in mine.

4. Understanding Mr. Boswell to affirm in his report that the Zemindars were much more liberal in the conservancy of irrigation works than the Government, I joined issue with him; but he explains that that is not his meaning; he merely wished to say, it seems, that their tanks and channels are, as a matter of fact, in better repair than ours, and he altogether agrees with me in the reason I assigned for it, viz., that getting little or no help from their landlords, the Zemindary Ryots put their own shoulders briskly to the wheel, while our Ryots expect nearly every thing to be done for them; at the worst they know they will get a remission of the assessment. He concurs with me that we go a great deal too far in our liberality, and indeed brands the whole system of remissions as deeply "demoralizing."

5. He concludes, however, with remarking that "what we have to deal with "is not a question of principle, but to carry out a certain system." I am not aware that I needed to be reminded of this, for I profess to be as practical as my neighbours. "No doubt, however," I wrote at paragraph 5 of my letter to the Superintending Engineer, "while this system continues of unrestricted remission for 'Bunjer' and 'Shavi,' our best policy lies in rendering the occasions for it as few as possible;" the remedy being a more generous outlay by Government in the work of conservancy; but not wholly this, for it is now conceded by Mr. Boswell, at a somewhat late stage of the discussion to be sure, that the timely attention which our Ryots are bound by usage and regulation to render to their channels and tanks is pretty uniformly neglected in his Táluqs. "It is impossible," he says, "to get "our Ryots to do their share in this way, even though their own interests are involved

"in the matter. They leave the small injury to a channel or a tank bund until it "gets larger and larger, and only then bring it to the notice of the authorities." But where, meanwhile, are the Revenue Inspectors, the Village Accountants, the Headmen? If nobody is punished for this neglect, and the Ryots are rewarded for their neglect and sloth by a handsome remission, this year *one-fourth of the entire public demand*, while not one Rupee has been lost to the neighbouring Zemindars, what is to be the end of it?

6. If the present state of things is to continue, viz., the "impossibility" of getting Ryots to do their share of the work with liberal remissions notwithstanding, I am serious in proposing that the two Táluqs be put up to the highest bidder with the present average collections as the annual Jama or Peishcush. Many of our wealthy Zemindars would compete, and the following advantages would result:—

(*a*) A large present sum, the result of the sale, to Government.

(*b*) The Zemindary system of conservancy, whereby the repairs will be well done; the Ryots shut out from the present "demoralizing" system in vogue with us, and every beholder "struck" (like Mr. Boswell) "with the verdure and fertility of the lands."

(*c*) The abolition of two Tahsildars, several Revenue Inspectors, and a numerous and expensive train of minor officials.

(*d*) The abolition, finally, of the Principal Assistant and great part of his Office, to be replaced by an Officer of the grade of Head Assistant, with two or three Munshis and Writers only.

From the Principal Assistant Collector, to the Superintending Engineer, 1st Division, Waltair, dated Narsipatam, 14th May 1866, No. 82.

I have the honor to reply to your letter, No. 3,178, dated 16th April.

There are four main sources of irrigation in the two Government Táluqs of this District, Golgonda and Survasidhi. There are the two rivers, Varahanadi and Saradanadi, and the two lakes, the Kondakerlah Ava and the Komoravolu Ava. I will treat each of these separately.

1. The Varahanadi or Punderu or Koppaka river (known by all these names) rises in the Golgonda Hills, about twenty miles to the north-west of Narsipatam, and taking a south-easterly course for about forty-five miles, enters the sea at Watada. On this river there are three anicuts belonging to Government, and four belonging to proprietors, through whose lands the river flows. A new anicut, about eighteen miles from the head of the river, and about three miles from Narsipatam, was constructed in 1862-63. This is the Gubbadah anicut. When this work was undertaken, it was estimated that through its means 4027·8¼ acres might be irrigated. In Fusly 1273, 516 acres were taken up at a Shist of Rupees 1,289-11-0; but on account of insufficiency of water, only 341·43¾ acres were cultivated, and charged with a Shist of Rupees 853-9-6. In Fusly 1274, 811·87½ acres, assessed at Rupees 2,342-2-0, were taken up; but in that Fusly also a large portion of the land had to be left waste for want of water, and a remission of Rupees 1,090-10-11 was granted, viz., Rupees 954 on Bunjer, and Rupees 136-10-11 for Shavi. In Fusly 1275 797·12½ acres, assessed at Rupees 2,757-5-0, were taken up; but in this Fusly also remission had to be granted to the extent of Rupees 183-14-0 for Bunjer, and Rupees 930-2-0 for Shavi. The following Statement exhibits the particulars of the land which the anicut was originally designed to benefit in sixteen villages, and the extent that has been cultivated and brought into cultivation up to this time:—

Number.	Names of villages.	Ayacut originally estimated.		Alukubadri, as per Fusly 1275.	
		Extent in area.	Shist.	Extent in acres.	Shist.
1	Narsipatam	1007·87½	2,519 11 0	488·25	1,708 1 6
2	Baigottam...	1086·25	2,715 10 0	80·00	280 0 0
3	Pedda Boddapelli	144·62½	361 9 0	5·37½	18 13 0
4	Laksmipuram	628·75	1,571 14 0	126·00	442 14 6
5	Gundapalla...	458·37½	1,150 6 0	84·00	294 0 0
6	Chettupelli	347·93¾	819 13 6	.....	... ...
7	Yerakanapetta	13 75	43 2 0	.....	... ...
8	Chedegumala	67·50	220 0 0	.....	... ...
9	Nindugonda	33·75	84 6 0	.....	... ...
10	Dugada...	96·25	240 10 0	.....	... ...
11	Durmasagaram	50·62½	134 10 0	.....	... ...
12	Nelamperta Agraharam	30·12½	50 5 0	4·00	4 0 0
13	Veerabhupatapatam do.	23·00	57 8 0	5·00	5 0 0
14	Polavaram do.	17·00	42 8 0	.....	... ...
15	Gubbada Mokassah	29·93¾	72 5 6	4·50	4 8 0
16	Gurandorapalem	23·06¼	57 10 6	.....	... ...
	Total...	4027·81¼	10,142 0 6	797·12½	2,757 5 0

Up to this time there has been expended on the anicut Rupees 17,696. The original idea remains very far from being realized. Last year I submitted, for sanction, a scheme proposed by the Supervisor in charge of this Range, M. Rungaya Naidu, for the construction of eleven reservoirs along the course of the main channel, for the purpose of storing the water brought down by the freshes. The estimate for these amounted to Rupees 3,000, and Rupees 3,000 was added for the excavation of branch channels from the main one; but the present Supervisor, Mr. Laskey, considered this scheme impracticable, which his predecessor drew up, and submitted instead an estimate for the construction of a single tank at Lutchmepuram, at a cost of Rupees 8,200, which he estimated to be capable of containing 824,040 cubic yards of water, and bringing about 400 acres of waste land into cultivation. This estimate the Collector refused to pass, and by his instructions I have called upon Mr. Laskey to have prepared complete plans and estimates for the whole work as originally contemplated, instead of submitting the project piece-meal. The further prosecution of this important work remains with the Department Public Works. At a rough calculation, Mr. Laskey estimates that Rupees 16,000 will still be required for the subsidiary works, and he holds that, after all has been done that is possible, this anicut can never irrigate more than half the original area estimated, viz., 4,000 acres, according to the scheme prepared by Mr. Supervisor Bevan.

Following the course of the Varahanadi as it runs towards the sea, we find a large extent of Nunjah land in the Survasidhi Táluq which ought to be irrigated by it; but I regret to state that these channels and tanks have for many years been terribly neglected. The beds of the channels have silted up, and now convey but very little water to the tanks, many of which also have been suffered to fall into disrepair, and could not retain the water were it brought to them. The consequence of this is, that I have had to make large remissions of revenue on these lands during the two past years; in Fusly 1274 Rupees 3,095-13-2, and in Fusly 1275, Rupees 18,843-9-9. True there was a failure of rain in both these years; but had the tanks only been in good order, and the channels capable of conveying to them the water which the river brought down, and much of which was carried off to the sea, I apprehend that the remissions, if any, would have been very trifling, in comparison of what had to be given for lands left waste from want of water, and on crops that perished from the same cause. I have strongly urged upon Mr. Laskey the necessity there exists for giving his first attention to this matter; but the funds granted for the ordinary expenditure of the year are quite inadequate, and the importance of the works demand a special grant.

2. The Saradanadi or Anakapalli river rises in Madugole, and takes a south-westerly direction, flowing through the proprietary estates of Anakapalli and Kassimcotta, and joins the Varahanadi at Watada, and then falls into the sea. This river flows only for a short distance through land under Government management ; but as a considerable quantity of water is annually carried to the sea, it would be very desirable to devise some means to make a large supply available for the purpose of irrigation. As a preliminary measure, it would be wise to make a careful survey of the lands in the neighbourhood of the river, and take the levels. I have requested Mr. Laskey to have a Register kept also of the depth and width of the stream in both the Varahanadi and Saradanadi, at the parts where they cross the trunk road, and again below the heads of the last irrigation channels. I have also desired him to have a section of the river at each spot taken, with the velocity of the current so as to calculate the discharge.

3. The Kondakerla Ava. When I visited the lake in February last, I find a large extent of water of an average depth of four or five feet, and yet a large number of the villages below had lost the greater proportion of their crops from want of the means of irrigation. I at once wrote to Mr. Laskey, and requested him to inspect the spot, and take the levels, and propose some plan by which the water in the large lake might be made available to a greater extent than it is at present. The difficulty in dealing with the matter is that more than half the water-spread of the lake is annually cultivated by the Ryots of the Proprietrix of Anakapalli. Their object, therefore, is to let off the water as quickly as possible. The dispute was settled by Mr. Fane, Collector, in 1860, by having a bench mark and calingulah erected to regulate the height beyond which the water should not be allowed to rise. But Mr. Laskey informs me that he has reason to believe that the Proprietrix' Ryots have surreptitiously lowered both the bench mark and the calingulah two feet. He proposes to meet the difficulty by raising a bund through the lake, to divide it into two portions, so that the water on the Proprietrix of Anakapalli's land may be let off by its own calingulah, on the 15th December as agreed on, while the rest of the Ava water is retained for irrigation as long as it may be required. At present the surplus water is conducted by a channel to the Varahanadi (river) and so carried off to the sea. This channel and its branches require clearing out, and the tanks which these feed are also in need of repairs. Mr. Laskey's estimate for the Kondakerla Ava scheme amounts to about Rupees 26,000, but the repairs of the tanks and channels must be added to this.

Mr. Laskey's design is to have in the bund separating the Government from the Proprietrix' portion of the Ava, a sluice of six vents, each one yard square, with iron water-tight shutters to work in wooden slides. He proposes that this sluice should remain open until the water has attained the calingulah's height, when the shutters will be dropped, and those of another sluice of the same number of vents built in line with the calingulah, and on the bench mark level will be opened, for the escape of all water above that level until the 15th December, when the water on the Proprietrix' portion of the Ava is to be drained off by means of a low level sluice with a single opening. Mr. Laskey also provides a low level sluice with openings $2\frac{1}{2} \times 3$ feet in the Government section, to carry out water for irrigation, and he estimates further, that two embankments will be required to protect the low lying lands in the north of the lake, and to the east of the village, and also two calingulahs thirty yards wide, to carry off the surplus drainage falling into the Ava. The area of this lake is above five miles square.

4. The Komoravolu Ava in the north-west of Golgonda Táluq. The amount of water at present stored in this natural reservoir is small, and last year, by some mistake of the Officers of the Department Public Works, the channel which supplies it was diverted, and no water consequently reached it. The consequence has been the necessity for remissions on the lands below it to the amount of Rupees 1,363-1-0. This year Mr. Laskey proposes, at a cost of about Rupees 10,000, to supply an anicut twenty yards in length, and raise by one yard the amount of water stored. He would also deepen and widen the supply channel, and raise embankments on both sides to protect the low lands in the north of the Ava. This would secure the present revenue, and bring new land into cultivation on the east of the lake.

5. The late Supervisor, M. Rungaya Naidu, informed me that he had a scheme for constructing an anicut in the Krishnadevipeta river, which rises in the Golgonda hills, and falls into the sea

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25*th October* 1866.

at Pentakota. I believe he took the levels and satisfied himself of the practicability of the scheme ; but he left before he had time to submit it. I can only say that, if there is, as he represented, a large amount of water running to waste in that direction, there is abundant waste land that might be benefited in the neighbourhood, and it would be very desirable to open up that wild part of the country.

There is another point to which I wish to allude. The irrigation works in the District have been so long neglected, that great encroachments are to be found in the areas originally allotted for the tank beds. Many tanks have even no existence except in name. Their sites have been all brought under cultivation. I have made it a rule to reject all offers to take up land in the bed of any tank ; but the same course was not always followed by my predecessors. As tanks are, therefore, repaired, it will be advisable that the Department Public Works should erect permanent bench marks to regulate the water-spread, and steps will be taken by the Revenue authorities hereafter, to keep such areas clear from all cultivation. The Government Táluqs in this District are shortly about to be surveyed, when the exact area of each tank will be registered, and prevent future encroachments.

Further, as to the emergency of these irrigation works. I can confidently state that unless a large sum be spent to check the ruin which from year to year is more and more visibly overtaking our channels and tanks, the Government revenue will be seriously imperilled. The present annual grants for repair of irrigation works are totally inadequate ; even to keep them as they are, and we have much lee-way to make good. I point to the revenue remissions, which I have had to grant on wet land for the last two years in my Division.

Táluqs.	Fusly 1274.	Fusly 1275
Survasidhi... ..	8,457 5 1	35,361 9 5
Golgonda	1,521 6 7	9,126 4 0

I never travel about the Táluqs, but in every direction I am beset with Petitioners, and their one cry is, "repair our irrigation works." From the multitude of applications I receive, I sift out those which appear to be the most emergent, and embody them in a list, which I forward to the Range Supervisor, requesting that they may receive his earliest attention. A few estimates are then submitted, and I am informed that the resources of the year are exhausted—"No more funds,"—and as a necessary consequence we have to let the irrigation works go to ruin and remit a large amount of revenue each succeeding year.

Allow me to put in juxta-position the revenue of the two Government Táluqs in the three last years, and the amount spent on irrigation, on new works, and repairs, and the amount of remissions granted in each year :—

Year.	Revenue according to Settlement.	Remissions.	Expenditure on new Irrigation Works.	Expenditure on Repair.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
1863-64...	2,00,502 2 7	23 6 0	10,789 1 0	10,904 11 7
1864-65...	1,92,231 5 6	9,978 11 8	6,450 2 4	10,503 7 11
1865-66...	1,52,376 15 4	44,487 13 5	1,501 13 0	5,643 4 3

I infer from this that each year, as the amount of outlay on irrigation works is reduced, the amount of remissions that has to be granted increases proportionably, and the longer that the necessary repairs are delayed, the larger outlay will be necessary in the end to make good the dilapidation, which might have been checked in the beginning at a fraction of the cost. I regret to say it, but it is a fact that the state of irrigation works in the Government Táluqs of this

Districts contrasts most unfavorably with what may be found in some of the proprietary estates where I have ascertained that no remissions at all have been necessary this year, notwithstanding the unfavorable nature of the season on account of the failure of rain. I have, in the current month, taken over charge of the Nirganti establishment from the Department Public Works, according to the Order of Government ; and as a preliminary measure, I have sent the Gumashta down the whole course of the Varahanadi to make a plan, and report upon the state of every channel and tank dependent upon that river. I have also received from each Tahsildar a list of all the irrigation works most emergently in need of repair in his Táluq. All I can do is to forward them on to the Supervisor. I do trust that a large special grant may be assigned this year for the urgent need of this District. Let the irrigation works be once put in thorough repair, and a sufficient annual sum be allotted for their maintenance, I am sure there need be no necessity for future remissions. Within the last few years it is deplorable to see how the value of land has fallen in the District, all because the means of irrigation have been neglected. Many Ryots this season have thrown up their holdings, and migrated to the Godavery District to look for work. When the lands are attached and put up to auction for the recovery of arrears, there is no one to come forward to bid for them. Were the irrigating tanks and channels only maintained in repair, such lands would fetch at from seven to fifteen years' purchase. Need I add another fact to prove part neglect, and the urgent necessity of doing something immediately.

From the Collector of Vizagapatam, to the Superintending Engineer, First Division, Waltair, dated 17th May 1866, No. 398.

1. I have the honor to forward the Principal Assistant's reply* to your letter of the 16th April ultimo, No. 3,178, regarding the condition of irrigation works in the two small Government Táluqs of this District, viz., Golgonda and Survasidhi.

* No. 87, dated 14th May 1866.

2. Mr. Boswell, you will observe, reports that the present annual grants for repairs are totally inadequate ; and that what is required is that the tanks and channels shall once for all be put into a thorough state of efficiency, when the revenue will be permanently secured to Government, at the expense of a very trifling outlay for future years.

3. The remissions made during the late settlement on account of lands classed as "Irrigated" being left uncultivated for want of water (Bunjer) or bearing crops which have perished from the same cause, (Shavi,) amount to Rupees 44,487-13-5, figures which must be considered alarming, representing, as they do, nearly one-fourth of the average collections of the two Táluqs. Mr. Boswell is of opinion that with a really efficient state of the tanks and channels, the amount of remission would have been comparatively trifling, and he points to the fact that "no remissions have been found necessary in any of the Zemindary estates" in the neighbourhood.

4. I must say I cannot here unreservedly follow him either in his conclusion, or in his inference. In 1863-64, or two years ago only, you will remark that on a revenue of over Rupees 2,00,000, we remitted Rupees 23-6-0 only, which remission I particularly remember was owing to an *excess* of water. The fact is that there has been little or no rain in the District itself, and very few freshes have been brought down by the rivers. In such cases, our instructions compel us to extreme liberality with our Ryots ; in my opinion we go a great deal too far in that way. I have no reason at all to believe that the Zemindars incur greater expense than we do in the repair of irrigation works. Their general method is to give nothing at all till a crisis is actually in view, when they dole out a small sum to eke out the labor and contributions of the villagers themselves, and as they never make a remission to their tenants, (on the grounds, (1) that the Government never make a remission to *them*, and (2) that the profits of good years must be set against the losses of the bad,) the latter put their shoulders to the work of repair with a will, while our Ryots, though very glad to get the water on their fields, expect the Engineers to scour their channels and mend their tanks. "The monsoons are pretty regular on the whole, and if in any "year it is otherwise, why should we exert ourselves ? The Government undertake the irrigation

"works, and if water is not brought to our lands, we shall get a remission. Let the Zemindary "Ryots bestir themselves, if they will. It is a matter of life and death to them. *We* live under "a more benevolent system."

5. No doubt, however, that while this system continues, of unrestricted remission for Bunjer and Shavi, our best policy lies in rendering the occasions for it as few as possible. The four principal sources of irrigation are the—

(1.) Varahanadi .. ..} Rivers.
(2.) Saradanadi ... ...}
(3.) The Kondakerla Ava... ... ...} Lakes.
(4.) The Komoravolu Ava... ... ...}

The first has channels in the Survasidhi Táluq, on which, you will note, irrigated land, assessed at Rupees 18,000 and upwards, depends. These channels, it is stated, are generally in a poor state of repair, The Gubbadah anicut is also dependent on this river. There is such a conflict of opinions and suggestions regarding this small work, (as recorded in detail by the Principal Assistant,) that we should be grateful for a decisive professional judgment on the question.

The second, in Mr. Boswell's opinion, is not sufficiently utilised.

For the security of the third, Mr. Boswell proposes a bund across the lake, which is to cost 26,000 Rupees ; but it seems to me that if we were to buy out the Anakapalli Proprietrix, whose tenants cultivate a great part of the water-spread of the lake, the same end might be attained at once in a cheaper and more expeditious way.

For the fourth, it is proposed to have an anicut at a cost of 10,000 Rupees, which would raise by one yard the amount of water stored, to widen the supply channel, and to raise embankments on both sides.

6. Besides these improvements and additions to the four existing sources of irrigation, it is hinted that a fresh anicut at Krishnadevipeta in the hills behind the village of Golgonda would be a profitable work. The late Supervisor, it seems, took some pains to investigate the project, but left the District before bringing it forward.

7. Some mischief to our supplies of water is now effected, it seems, from encroachments by the Ryots on the water-spread of the tanks ; but it is anticipated that when the Survey Department goes over the District, these will all be discovered, and a proper remedy applied to guard against any future detriment from the same cause.

From the Principal Assistant Collector of Vizagapatam, to the Collector of Vizagapatam, dated Narsipatam, 23rd May 1866, No. 87.

1. I have the honor to forward, herewith, a copy of my letter to the Superintending Engineer, with reference to the irrigational wants of my Division, and to request that you will be good enough to submit the same to the Board of Revenue, in order to pave the way for the estimates of certain large works, which, I trust, the Superintending Engineer will shortly submit upon my proposals.

2. There are one or two remarks or explanations which I should desire to offer in reference to certain matters to which you have alluded in your letter to the Superintending Engineer, No. 398, dated 17th May, which gave cover to my communication above alluded to, and of which you have favored me with a copy.

3. You object to my statement that the condition of irrigation works in the Government Táluqs of the District contrasts most unfavorably with what may be found in some of the proprietary estates, where no remissions have been found necessary this year. The opinion I have been led to form is based upon personal observations. While riding from village to village, I have been struck with the verdure and fertility of the lands generally in such estates as those of Anakapalli and Kassimcota, and could not but contrast them with the parched and arid look of the

fields in many of the adjacent Government villages. There was water in the one case, and the crops flourished ; in the other it was wanting, and the Ryots beset me clamouring for remissions, and pointing around to the evidences of the failure of their crops. Now I am very far, as you infer, from supposing that our Zemindars and Proprietors are in the habit of laying out large sums every year in the maintenance of irrigation works. All I have done is to contrast the *results* of Zemindar management in this respect with those under Ryotwar ; and the conclusion I arrrive at is, that the Zemindar's way is the best for promoting the prosperity of the country, and the happiness and contentment of the people. As you have put it yourself, the Zemindar gives his tenants no remission, first on the ground that Government gives him none, and second, that the profits of good years must be set against the losses of the bad, and the Ryots are to a great extent left to look after their own irrigation works. And they do it. They learn to become independent and self-reliant. But in the case of our Ryots, Government undertake to keep the irrigation works in repair for them, or if water fails, to grant them a remission of their rents. What motive have they then for self-exertion ?

4. The system of revenue remissions has a most immoral tendency, and fosters that vicious habit of dependence on Government which stands in the way of all progress. It is laid down that repairs to irrigation works, whose cost is below Rupees 20, be left to be excavated by the Ryots themselves ; and were this rule enforced and acted on, a little timely attention would save the necessity for many future large estimates. But it is impossible to get our Ryots to do their share in this way, even though their own interests are involved in the matter. They have the small injury to a channel or a tank bund until it gets larger and larger, and only then bring it to the notice of the authorities. They will do nothing for themselves, content with the knowledge that if there is a favorable season they will have a profit to their labors, if not Government will remit them their rent. But what we here have to deal with is not a question of principle, but to carry out a certain system. Government undertakes the charge of the irrigation works and upholds the present free and liberal system of remissions. It only remains under these conditions so to manage as that there may be least loss to the State and most prosperity to the country. Accepting this position undoubtedly we ought to keep irrigation works in *thorough* repair. The Zemindar's way is the best we may think for the people and the country ; but as long as Government are pleased to continue the system of remissions, fostering the habit of dependency among their Ryots, it is better that Government should keep in thorough repair the irrigation works, and fulfil the task they undertake, than that they should be neglected and remissions may be necessary. At present our Government Táluqs contrast unfavorably with the proprietary estates, because our irrigation works are more neglected.

5. Another point in your letter to which I would offer an explanation is the Kondakerla Ava scheme ; you object to the proposal to erect a bund to divide the Government and Proprietrix' portions of the lake, suggesting that it might be cheaper and more expeditious to buy up the Anakapalli Proprietrix, whose tenants cultivate a large portion of the lake bed. The estimate of Rupees 26,000, besides this division bund, provides for new bunds on two sides of the lake. In any improvement of the lake these will be necessary. In settling a former dispute regarding this lake and the inundation of the Proprietrix' lands, it was arranged that should Government require in any particular year of drought, to retain water over the whole spread of the Ava beyond the 15th December, (the day on which the water is now let off,) the Proprietrix should receive Rupees 400 as compensation for the Dalwa or cold-weather crop of paddy. On the basis with this arrangement, therefore, compensation would have to be given for permanent reservation of the lake area. But I would strongly urge that something more than this be done to take advantage of the capabilities of this reservoir of upwards of five square miles, and to improve it so as to store a larger amount of water than it now can for the irrigation of the lands below. The only way to do this is by the erection of new strong bunds on two sides where the lands are on a low level. By this means the Ava might be made a permanent feeder for the Saradanadi, and its surplus water supply the tanks and channels dependent on that river.

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25th October 1866.

From the Collector of Vizagapatam, to the Acting Secretary to the Board of Revenue, dated 25th, June 1866, No. 490.

1. I have the honor to reply to Board's Proceedings, No. 3,608, dated 25th May ultimo communicating Government Order, Public Works Department, No. 1,587, of 17th idem, which calls for a Statement of the works of irrigation in the Survasidhi Táluq, which are not in an efficient state of repair, with some other particulars.

2. I submit an original letter, No. 106, of 22nd June instant, from the Principal Assistant, covering two lists of the whole of the irrigation works both in Survasidhi and our other Táluq, Golgonda, those requiring repair being duly indicated therein. More than one-half of the Survasidhi works, or 127 out of 238, are in need of repairs, while about one-sixth of those in Golgonda are in the same predicament.

The remission this year was in round numbers Rupees 45,000, a little over a moiety of which is attributed by Mr. Boswell to " disrepair of irrigation works."

3. It will be seen that no blame whatever attaches to the Officers of the Department Public Works. The Principal Assistant sends them his annual list of emergent repairs, and it is attended to, *so far as the money goes*, but the expenditure grants are small, and when they are spent, there is nothing more to be said about it.

A sum of 25,000 Rupees nearly is estimated by the Tahsildars as necessary to put the works into proper repair. Mr. Boswell seems to say he could do it for this sum ; the Department Public Works he believes would not do it for less than 50,000 Rupees or thereabouts. This opens up the question between the old " Mahramut" Department and the present Department Public Works.

4. As to the work exacted of the Ryots themselves, Mr. Boswell states that they are expected to execute minor repairs, those under 20 Rupees, and to clear the branch and minor channels ; but he so frequently admits towards the end of paragraph 5, that they very seldom trouble themselves to move in the matter of repairs at all, until the mischief is really serious, when they petition the Government to do the work for them.

5. After the repairs shall have been properly executed, Mr. Boswell estimates that an annual allowance of Rupees 11,000 will suffice to keep them in good order. He adds a brief notice of some projects for the improvement of the revenue by an enlargement of certain existing works ; I have already submitted his detailed proposals on the subject to the Board in my letter, No. 414, of 26th May ultimo, and its enclosures ; and it is not necessary to add anything to the opinion I expressed in those papers on the subject of remissions, their non-prevalence in the Zemindary Estates, the contrast between Zemindary Ryots and our own, to which subjects Mr. Boswell has again alluded.

From the Principal Assistant Collector, to the Collector of Vizagapatam, dated Narsipatam, 22nd June 1866, No. 106.

1. With reference to the Proceedings of the Board of Revenue, No. 3,608, dated 25th May 1866, I have the honor to submit two lists of the irrigation works in the Golgonda and Survasidhi Táluqs of this District, showing those which require repair. The Government, it is true, only called for a list of those in the Survasidhi Táluq ; but since I have settled the Golgonda Táluq, I have found a large amount of remission to be necessary here also, and the need for irrigational repairs to be also great. I have, therefore, submitted the lists in both. It will be seen that in Survasidhi out of 238 works, 137 are in need of repairs, and in Golgonda out of 482 works, 87 are in need of repairs.

2. The following Statement shows how much of the remissions granted during the recent Settlement was owing to the absence of repairs, and how much to the bad season:—

Táluqs.	Remission owing to disrepair of irrigation works.	Remission owing to state of the season.	Total.
Survasidhi ...	23,234 15 5	12,126 10 0	35,361 9 5
Golgonda ...	....	9,126 4 0	9,126 4 0

3. It has regularly been my practice, as well as that of my predecessors, annually to report to the Officer of the Public Works Department in charge of this Range all those works which required repair, particularly distinguishing those where the repairs were most emergently required. The Range Officer would then submit a series of estimate for the most emergent works, up to the amount allowed for the year's expenditure on irrigational repairs. As soon as that limit was reached, there was no other course open than to defer the remaining works for another year. The following Statement will show that for the last three years the grant for irrigational purposes has been reduced each successive year, and with its reduction the works have fallen into greater disrepair and the necessity for remission has increased.

Year.	Táluq.	Settlement.	Remission.	Expenditure on new irrigation works.	Expenditure on repairs of irrigation works.
1863-64.	Golgonda	70,565 3 2	23 6 0	10,789 1 0	10,904 11 7
	Survasidhi	1,33,815 13 0	88 10 7		
1864-65.	Golgonda	72,943 11 6	1,521 6 7	6,450 2 4	10,503 7 11
	Survasidhi	1,22,375 1 6	8,457 5 1		
1865-66.	Golgonda	68,936 15 11	9,126 4 0	1,501 13 0	5,643 4 3
	Survasidhi	1,00,809 13 1	35,361 9 5		

4. By a reference to the lists it will be seen that the Tahsildars estimate the necessary repairs—

In Golgonda, at Rupees 7,800
In Survasidhi, at „ 16,890

but when the Department Public Works come to prepare *their* estimates for these works, the amount will, at the very least, be doubled, and reach Rupees 49,380 for the two Táluqs. If the amount of the annual grant were left at the disposal of the Revenue authorities, there is no doubt the repairs could be executed at a much cheaper rate than they now are.

5. It is a practice in this District to require the villagers to execute themselves all repairs of a minor character, whose cost would be less than Rupees 20. If any work reported to the Range Supervisor falls within this amount, he reports the same to me, and I immediately order it to be done by the villagers. Similarly, whenever a petition is presented requesting the repair of a tank or a channel, it is always referred, in the first place, to the Tahsildar to ascertain, through the Revenue Inspector, whether or not the work is one which the Ryots should execute for themselves. I have just required the Tahsildars, in future, to submit a monthly report of works executed by the Ryots in their Divisions, and have impressed upon the Revenue Inspectors the necessity of strict supervision. The Government desire to be informed how far the practice obtains in this District of requiring the Ryots to clear or assist in clearing the accumulation in channels. Hitherto, I found in our Government Táluqs the Ryots have been by custom left to clear the branch and minor channels, but the clearance of the main channels has been periodically undertaken by the Depart-

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ment Public Works; while on this subject I am bound again to draw your attention to the demoralizing influence of the system of revenue remissions on our Ryots. While in all proprietary estates the Ryots know that they have no prospect of a remission to trust to in an adverse year, and that if the irrigation works are to be kept in order, they must undertake the duty for themselves, they thus learn the valuable lesson of independence, and acquire the useful habit of relying upon their own resources alone. On the contrary, under Ryotwary, a very different state of things prevails. Our Ryots never learn to walk alone, because Government does far too much for them, and as a consequence they expect Government to do everything. If the season is favorable, they expect large profits; if the means of irrigation fail, they confidently expect a remission in proportion to their loss, and so they have no adequate motive for exertion to stir them up to look after their own interests in the due maintenance of the irrigation works on which their villages depend. As a consequence, small injuries to tanks and channels are very seldom reported or brought to the notice of the authorities. The Ryots will not take the trouble to stir in the matter, though a very small amount of labor at an early stage would check further mischief. They leave the matter until it becomes more serious, and then petition to have the work repaired by the Department Public Works.

6. There are four main sources of irrigation in the two Táluqs under notice :—

1. The Varahanadi ..... } Rivers.
2. The Saradanadi ..... }
3. The Kondakerla Ava.. } Lakes.
4. The Komoravolu Ava. }

Besides the ordinary tanks and channels, for which, in paragraph 4, I have estimated that Rupees 49,380 will be necessary, the Officer in charge of this Range has under preparation an estimate for completing the works on the Gabbada anicut, so as to utilise the Rupees 17,696 that have been already spent, and this estimate will amount to about Rupees 35,000. He has also another for about Rupees 26,000 for improving the Kondakerla Ava, and a third for about Rupees 10,000 for the improvement of the Komoravolu Ava. These works will secure and somewhat increase the present revenue of these Táluqs. Supposing that a special grant be obtained for putting the irrigation works of this Division into thorough repair, I estimate that a sum of not less than Rupees 11,000 per annum will still be required to keep them continually in good order. I take this figure as the amount of the grant of the year 1863-64; unless something is done to augment the sum this year allotted, I fear that the revenue will be seriously emperilled.

7. My own impression founded on careful observation is, that the agricultural prosperity of the country, and the general contentment of the people is better secured in the end under Zemindary, where the Ryots get no revenue remissions, and from necessity are compelled to look after their own irrigation works than under Ryotwary, which is an unnatural system which fosters the vicious habits of dependency, and props up in the enjoyment of proprietary rights, men wholly without capital or the means of improving the land, men who, in the natural course of things, would find their level in the lower ranks of labor. There are only two Ryotwary Táluqs in this District. It remains for Government to consider the proposal which you have already made to the Board of Revenue, that these two Táluqs should be put up to auction, and sold to the highest bidders in conveniently sized estates, the revenue being permanently settled on an estimation of the receipts of the last few years. I believe this arrangement would be better for the revenue, for the country, and for the people.

Enclosure No. 2.

Abstract.—Register of tanks and channels, &c., in the Survasidhi Táluq, for Fusly 1275.

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1. Ordered that the foregoing reports on the state of the irrigation works in the two Government Táluqs of Vizagapatam District be submitted for the consideration of Government, with reference to Government Order, dated 17th May 1866, No. 1,587, Public Works Department. The Board do not think any obser-

vations of theirs necessary to establish the imperative necessity of some special effort for the restoration of the irrigation works of this District, if the revenue is to be maintained.

2. There are, however, some points in the correspondence which the Board desire to notice.

3. First, as to the peculiar difficulty said to be experienced in dealing with the Kondakerla Ava tank, consequent on more than half the water-spread of the tank being annually cultivated by the Ryots of the Proprietrix of Anakapalli; the Board desire the Collector to inquire carefully and report how far this practice is based on long established custom, and needs to be permitted as a right. The practice seems a very extraordinary one to be allowed by the neighbouring Ryots to grow up unquestioned. The estate is one of recent creation, and it seems scarcely credible that so injurious a custom for the public revenues should have been distinctly contemplated in fixing the assets of the Havelly.

4. Unless the position of the Anakapalli Ryots is found to be perfectly unassailable, the Board consider that the practice should not be acquiesced in by the Government Officers, but that steps should be taken to try the asserted right, or at least to secure a remedy for the consequent injury inflicted on the Ryots in the Government Táluqs.

5. Next, as to the asserted wilful inaction on the part of the Ryots in the performance of such petty works of maintenance and restoration as by the custom of the country properly devolve upon them, and as to the baneful effects of the rules for remission, the Board would repeat the Collector's own remark—"Where are the Revenue Inspectors, the Village Accountants, the Headmen?" Why is "nobody punished for this neglect?" Why are "the Ryots rewarded for their neglect and sloth by a handsome remission?" Why is not customary labor enforced, and the powers given by Section 6, Act I of 1858, properly exercised? The remedy evidently rests to a considerable extent with the Revenue Officers themselves, and the rules for remission were never intended to encourage sloth and neglect in the way it is said they do. They expressly limit remission to cases of loss to Ryots from causes *beyond their own control*, and would bar all claims to consideration for losses due to neglect of customary work. What that custom was is established beyond all doubt by the admitted practice in the Zemindary tracts, where the liability has been maintained down to the present time by the common action of the villages.

6. It may well be that some laxity of administration in past times has allowed matters to come to such a pass that Government aid must be given to a considerable extent to recover the lost ground, but this fact is no reason for present and continued inaction in the direction pointed out, and the Board rely confidently on the exertions of Messrs. Carmichael and Boswell, who so keenly appreciate the evils of the present state of things, to apply effectively the partial remedy which is in their own hands.

7. The Board are satisfied from numerous intances which reach them that, in this matter, the people only need to be led, and to receive some assurance that the liability shall be equitably and regularly enforced on all alike, in order to ensure

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the attainment of very successful results. To do this is the work of the Government Officers. Conciliation will do much; the Ryots' own interests in the matter as it affects their income must have its proper weight; and the powers conferred by the law are probably quite sufficient to enforce the common liability on those who would evade it, and leave their share to be borne by their neighbours. At any rate they should not remain untried.

8. Lastly, as to the asserted superiority of the Zemindary system in this respect for promoting the progress of the country and the happiness of the people, the Board cannot admit that the acts are fairly stated or the deductions from them legitimate. Experience altogether controverts the position that Zemindars are able to throw the expense of maintaining expensive irrigation works on their Ryots, without giving them any assistance or granting them remission. The contrary is very generally the case. The ruinous state of the irrigation works in very many Zemindaries is notorious. The fact that a far-seeing liberality has been necessary to secure the opposite result in the exceptional cases is unquestionable.

9. The equity of remissions for losses in wet cultivation from causes beyond the Ryot's control does not admit of question; and although the sharing system so generally in vogue in Zemindaries may tend to conceal the fact that a remission is given under it in unfavorable season, that remission is as certainly, and perhaps even more certainly, enjoyed by the Zemindary Ryots than under the Government rules for the Ryotwary Táluqs. But the Government rules, fairly applied, give all that, and no more than is needed, and the Board's faith in the superiority of the Ryotwary over the Zemindary system when both are fairly tried, is in no way shaken by the asserted ill-results of a misapplication of the rules.

No. 602. ORDER THEREON, 25th October 1866, No. 3,409.

CIVIL WORKS, No. 115.

1. With the above Proceedings the Board of Revenue submit letters from the Collector of Vizagapatam and his Principal Assistant, giving the information called for in G. O. No. 1,587, dated 17th May 1866, regarding the state of the works of irrigation in that District, and furnish Statements of those works showing the condition of each, and the probable amount required to place it in repair.

2. In the opinion of the Principal Assistant, the unsatisfactory state in which the irrigation works are shown to be is, in the first place, due to a want of sufficient labor being contributed by the Ryots themselves to keep the channels clear of deposit and to repair petty injuries, which, when neglected, increase till they are the cause of serious damage or loss, when they are for the first time brought to notice, and in the second place, to the grant annually made for repairs being inadequate for the purpose since that customary assistance in labor has ceased to be exacted from the cultivators and Government has assumed the entire conservancy of the works. Mr. Boswell estimates that an expenditure of Rupees 49,380 is necessary to place all the irrigation works in a proper state of repair if the work be carried out by the Public Works Department, or half that amount if it be entrusted to the Revenue authorities; and he intimates that plans and estimates to an amount of 72,000 Rupees are in preparation for improvements which are required to secure and increase the revenue.

3. The Government have every disposition to treat irrigation works with special liberality, but the yearly assignments of money in the Public Works Budget are so inadequate that, as is well known, it is impossible, without ignoring the claims to attention of all other works of public improvement, to set aside larger sums from those assignments than have been annually appropriated to repairs in the several Districts of the Presidency. The responsibility therefore of throwing the whole burden of maintaining the irrigation works in Vizagapatam upon the Government, and of consequently allowing those works to fall into the state in which they are alleged to be, must rest in a great measure with the local Civil authorities, for a very little exertion on their part would, from their own showing, have saved the long established custom falling into desuetude of the Ryots themselves keeping their irrigation tanks and channels in a state of efficiency with only occasional assistance from the State.

4. The result is not creditable, but the statements which give the name and value of each tank and channel show that these are individually of very inconsiderable magnitude and that, in the generality of cases, the repairs required to them are of a description which, had the Ryots been called upon to bear their proper share of the labor of conservancy, would probably not have been needed, and are even now of such an extent as they might very fairly be compelled to perform. These repairs are all such as can be very readily executed under the control of the Revenue Officers without the intervention of the Public Works Department, and, as the Principal Assistant asserts that, if entrusted to him, they will be carried out with half the money which they would cost under the management of the Public Works Department, the Government consider that Vizagapatam will be a favorable District in which to try the experiment of transferring the maintenance of all petty irrigation works to the Revenue Department, and they resolve to add that District to the four in which the change was directedt o be made in G. O. No. 3,408, dated 25th October 1866. Orders will be issued in the Revenue Department to this effect, and an adequate sum for repairs will be included in the Budget of that Department.

5. Copies of these Proceedings will be furnished to the Superintending Engineer who will endeavour to submit full detailed plans and estimates for the improvements alluded to by the Principal Assistant, in order that, if funds can be spared, some provision for their execution may be made in the outgoing Public Works Budget.

(True Extract.)

(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

/True copy/
Charles A. Orr Colonel R.E.
Secretary to Govt

To the Revenue Department, with two Enclosures.
,, Board of Revenue.
,, Superintending Engineer, 1st Division.
,, Controller of Public Works Accounts.
,, Accountant General.
" All other Supt. Engineers
" Financial Department /

Exd. S. T. Augustin.

Letter to Govt. Nos.

Financial 1866. DEPT.

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P. Works Department.
No. 3409

Dated 25 Octr
Received 14 Novr 1866 186 .

No. 434

Transferring the charge of the Petty Irrigation Works in the Trincomalee District to the Revenue Department
15 Novr 1866 No 428

50. 51.