M.R.O. 14—13,000—27-8-24

MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No. 926	Press ~~Mis.~~
348. 349	
Dated 25-4-1867	

Not to be folded or roughly handled

Proceedings of the Madras Government, Revenue Department,
25th April 1867.

No. 348. Read the following Proceedings of the Madras Government in the Public Works Department:—

Passing orders on Board's Proceedings, recommending the restoration of certain irrigation works in Vinucondah talook, Kistna District. } (Here enter 17th April 1867, No. 1,185.)

No. 349. ORDER THEREON, 25th April 1867, No. 926.

Miscellaneous.

Ordered to be recorded.

(True Extract.)

(Signed) J. GROSE,
Under Secretary to Government.

Exd. S. T. Augustin.

No. 372. Read the following Proceedings of the Board of Revenue, dated 1st April 1867, No. 2,054 :—

Read again letter from the Collector of the Kistna District, dated 8th February 1867, No. 38, recorded in Board's Proceedings, dated 9th March 1867, No. 1,466.

Read also the following letter from the same Officer, dated Masulipatam, 2nd March 1867, No. 57.

With reference to my letter, of the date and number as per margin, on the subject of the ruined tanks in Vinucondah talook, I have the honour to forward, herewith, copy of a letter from the Superintending Engineer, containing his observations on the eight works he inspected when he proceeded to that talook in this month.

8th February 1867, No. 38.

From the Superintending Engineer, 2nd Division., to the Collector of the Kistna District, dated Camp at Rampecherla, 16th February 1867, No. 192.

With reference to your letter, No. 4, dated 8th February, I have the honour to inform you that I have visited the tanks marked 4, 5, 6, 7, 8, 14, 18, and 21 in your list, and to make the following observations on them :—

No. 4. *Kistna Gunduroula Tank* in Pedda Kuncherla.—The estimate of this tank may have to be somewhat altered, as I would propose the calingulah should be built at site of breach ; but I do not think it need be exceeded.

No. 5. *Pedda Chervoo* in the same limits : a somewhat barbaric piece of engineering. The situation is bad, as the bed of river slopes considerably ; and would not, therefore, allow for much backspread ; whilst the sides of valley continue close, instead of opening out into a good basin in which water might be stored.

The bund is carried across the river where the sand *appears* very deep, and, unless the earthwork were carried down to rock or protected by a very extensive apron in rear, and puddled in front, the probability is, the sand would be forced out and the work breach. Further, it is situated above junction of the stream-supplying tank, No. 4, so that all water to irrigate lands on right bank of river would have to be carried across it ; and, lastly, the country which could be irrigated would be comparatively small in comparison with that which a reservoir three or four miles higher up would command. The escape is very small, and from its appearance as well as other indications, I think the bund of the tank could never have been finished, and that it breached before any irrigation could have taken place under it. Roughly speaking, its restoration could not be accomplished for less than a lac of rupees ; and though it is possible that even then, it would be a remunerative undertaking, I am not disposed to recommend it, as a better position is available higher up the stream.

No. 6. *Dondapaud.*—The situation of this tank is very favourable. It will command a large extent of country, and the rise of the valley seems very moderate, and the basin will be broad. The catchment area drained by the Pompalairoo which will supply, is about thirty miles ; allowing that seventy-two inches of rain fall upon this area, and that after deducting for evaporation, absorption, and the water which fills other tanks, only one-third of the amount reaches Dondapaud reservoir, we should have nearly 62 million cubic yards of water preserved. Now, as each acre may be supposed to require 2½ cubic yards per hour, for one hundred and twenty days to bring a crop to maturity ; this would be sufficient to cultivate 8,602 acres, which at 5 Rupees an acre would give 43,010 Rupees ; from which

$$1{,}760 \times 1{,}760 \times 2 \times 30 \times \tfrac{1}{3} = 61{,}952{,}000 \text{ C. yds.}$$

about 7,000 Rupees must be deducted for land now under dry cultivation, &c., leaving a balance of Rupees 36,000 per annum as net profit, if the tank be restored. The breach is 170 yards wide at base, and its maximum height is 8½ yards allowing slopes of 3 to 1 in front, 4 yards top width, and 2 to 1 for the rear slopes; the earthwork, &c., may be computed thus—

			Rs.
Earthwork	170 × 25¼ × 8½ = 36,486 cubic yards at 3 Annas ...		6,841
Revetting with stone ...	170 × 20 × ½ = 1,700	,, 1 Rupee ..	1,700
	Yds. Yds. Yds.		
Enlarging the escape from 14 to 89 yards	66 × 200 × 3 = 39,600	,, 3 Annas ...	6,000
Making channels, clearing sluices, &c.	... ...		6,000
Say 22,000 Rupees.		Total...	21,966

If the full amount of acreage that could be taken up is brought under cultivation, there would, therefore, be a profit of upwards of 163 per cent. If only the amount stated by the Tahsildar is available, viz., 5,047 acres yielding a net profit of 18,649 Rupees, it would still return 81½ per cent.

N. B.—The escape must be secured first. This work should undoubtedly be speedily undertaken.

No. 7. *Ainavole Tank.*—A wretchedly planned work, in a bad situation, but I am disposed to think that if an anicut were built across the river at Chintala Chervoo, or even if the river be dammed up, in that neighbourhood to form a gigantic tank, very large wet cultivation might be undertaken, and the work prove very remunerative. I had not time to explore the river at the site last indicated, but I hope to do so on some future occasion.

No. 8. *Payeedipaud.*—I find no calingulah has been allowed for this tank. I shall have an estimate made for one, which can be executed as a minor new work before the breach is closed.

No. 14. *Payadipad Scerum Vurayakunta.*—This work is not worth repair.

No. 18. *Sevaleeyapuram.*—This is a better site than that at Kuncherla for damming up the waters of the Kanger, but without further investigation I am not prepared to recommend it. Some position in the neighbourhood will, doubtless, be found either for a tank across the stream, or an anicut from which water could be led into a chain of narrow but deep tanks on the side of the rising ground on both sides the river, and thence cultivate the more level borders of the stream for a considerable width on each side. I regret that fever prevented my looking into this matter, as I should have desired.

No. 21. *Brahmanapilly.*—The restoration of this tank should, I think, be further considered. The breach is about 50 yards wide and 5 yards deep; bottom rocky; Basin good; soil, hard gravel. If a good escape is provided it should answer. Probable cost 1,700 Rupees. Probable returns from 250 Rupees to 500, but I *think* there will be water for much more than 100 acres. It is worthy of further investigation.

I regret I could not visit the site you mention at Bollapully, but I hope to do so some future day. Meanwhile there will be work enough on hand for one talook, if the Gunduroula tank in Pedda Cuncherla, the Dondapaud tank, and the Pydipaud tank are undertaken and investigations made for good site for reservoirs or anicuts on the Kanger and the stream which runs by Ainavole. I propose sending a Surveyor as soon as possible to take the necessary levels and measurements for the Dondapaud tank.

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1. In his letter, dated 8th ultimo, No. 38, the Collector of the Kistna District forwarded a list of ruined tanks, the restoration of which he urged as alike remunerative to the State and beneficial to the people, and a copy of a letter which he had addressed to the Superintending Engineer, Colonel Winscom, on the subject. With the letter recorded in these Proceedings he submits Colonel Winscom's reply.

2. The works mentioned by Mr. Thornhill are all in the Vinucondah talook, which is described as being well adapted for, and having at some remote period evidently been well supplied with means of irrigation. In addition to the old tanks Mr. Thornhill enumerates some promising sites for large new works.

3. Colonel Winscom has as yet been able to examine only a few of the tanks, but he mentions three in particular as worthy of early execution. The names of these, with the probable cost of restoration and clear profits, are given in the margin. It will be seen that four-fifths of the outlay will be repaid by the profits of a single year, and that the maximum revenue realizable in considerably in excess even of this satisfactory prospect.

	Estimate.	Receipts.
No 4, Goondarala	1,870	1,628
No. 6, Dondapad	22,000	18,650
No. 8, Payadipad	1,390	347
	25,260	20,625

4. The Board would strongly recommend that the small sum required for these three works be placed at the disposal of the Superintending Engineer as soon as possible, and that he be supplied with the means of having the irrigable capabilities of the talook carefully and speedily investigated.

5. Mr. Thornhill and Colonel Winscom merit the thanks of the Board for so promptly bringing forward these improvements.

Proceedings of the Board of Revenue, dated 9th March 1867, No. 1,466.

Read the following letter from the Collector of the Kistna District, to the Secretary to the Board of Revenue, dated Circut Cutcherry at Kollur, in Repally Talook, 8th February 1867, No. 38.

1. I have the honour to forward copy of a letter and enclosure, addressed to the Superintending Engineer, 2nd Division, regarding the restoration of ruined tanks in the Vinukonda talook.

2. Should the report of the Superintending Engineer be favourable, I trust the Board will support an application for funds for the work proposed.

3. It is, I am aware, the opinion of Engineers that no works in the Northern districts will yield so large a return as the works in the deltas of the Godavery and Kistna, but if the actual money returns on such works are likely to be higher, the blessing conferred on the people in inland and mid districts is proportionably far greater.

From the Collector of the Kistna District, to the Superintending Engineer, 2nd Division, Nellore, dated Circuit Cutcherry at Kollur, in Repally Talook, 5th February 1867, No. 11.

1. I have the honour to forward a list of ruined tanks in the Vinukonda talook, to which I would beg your attention, whenever it may be convenient either for yourself or some competent Officer of your department to visit the talook.

2. Many of these works have been disused for centuries, and it would appear as if at some remote period this part of the country had been well provided with works of irrigation.

3. The talook is, in many respects, well suited for irrigation, and I believe many of the works now instanced will well repay repair. The soil is for the most part light and poor, and not highly productive under dry cultivation, but the very superior quality of the rice grown under some of the few existing tanks, shows that it may be made highly fertile by irrigation.

4. The country is intersected with hill streams, and the body of water that passes down them will be amply sufficient, if preserved, for the irrigation of large tracts. The valleys of

these streams are, moreover, in many instances waste, and covered with jungle, so that the formation of large reservoirs of water will not generally submerge much cultivated land.

5. In addition to the many old works enumerated, I have entered in the list one or two sites which were indicated to me as suitable for the construction of new works.

6. The principal river of the talook is the Gundlacumma, which passes through the Cumbum tank in its upper course, and finds its way to the sea in the Nellore District.

7. The valley of this river is so contracted, the bed so deep, and the country generally so precipitous, that I doubt if it could be profitably diverted for irrigation purposes within the limits of the Vinukonda talook. It might, however, probably be quite feasible to construct a series of reservoirs in the valley, to feed irrigation works lower down the stream in the Nellore District, where the ground would appear to be more favourably formed for irrigation.

8. Nos. 4, 5, 16, 18, 21, 22, 23, and 24 were inspected by myself in person, the rest by the Deputy Collector, or by some of the talook officials; of the former, I would specially note the Dondapad tank (No. 6), and the site proposed for a new tank at Bollapally. The first named would, I believe, require a comparatively small outlay to restore it, and to form a magnificent reservoir of water, and the site at Bollapally appears to an unprofessional eye capable of being adapted to form a large tank at a small cost. The bund need not be long, the waterspread would submerge nothing but jungle, and it would command an extensive valley partly under dry crops and partly waste.

9. I may add that the villagers are all anxious to obtain the benefit of irrigation, and ready to take up any land that may be available for wet cultivation.

10. Should you form a favourable opinion of any of these projects, I would suggest that they should be brought forward with a view to their construction from the Loan, which it appears likely will be raised by Government for such purposes.

11. I have called for similar returns from other talooks, which shall be submitted to you in due course.

Enclosure No. 2.

Abstract.—Extract from the Statement of ruined Tanks in the District of Kistna.

Dondapaud Tank.—Enlarging the escape from 14 to 80 yards, 66 × 200 × 3 = 39,600 at 3 Annas, Rupees 6,000.				

The Board will be happy to give their support to the Collector's proposals should the schemes suggested prove feasible. The Board do not doubt that irrigation works may be constructed in the Northern Division with as good prospects of successful results as in any other part of the Presidency.

Transferred to the Department of Public Works for disposal.

(Signed) W. HUDLESTON,
Secretary to Government, R. D.

4*th April* 1867.

No. 373. Order thereon, 17th April 1867, No. 1,185.

IRRIGATION, No. 22.

The projects referred to in the Proceedings of the Board of Revenue above recorded have not been laid before Government in a complete and practical form; but, being unwilling to defer the execution of works which promise to be highly remunerative, His Excellency in Council resolves, in compliance with the Board's recommendation, to allot the requisite funds (amounting to Rupees 25,260) from the Reserve under "Agricul-

tural." Colonel Winscom will submit the necessary plans and estimates for sanction-accompanied with fuller explanation, more especially with reference to the item marginally noted, which is not clearly understood.

(True Extract.)

Colonel, R. E.,
Secretary to Government.

To the Board of Revenue.
" Superintending Engineer, 2nd Division.
" Accountant General.
" Controller of Public Works Accounts.
" Revenue Department.

Exd. S. T. Augustin.

1-5-12
6.6.13

Revenue 1867 Dep^t
Pro of Govt for April
No 1030

Proceedings in the
Public Works Dep^t

Dated 17 April 1867
Received 19 April 1867

17

Passing orders on
Board's Pro: recommending
the restoration of certain
irrigation works in Vinaco-
dah taluk, Kistna Dist^t.

No 926.

RECORDED.

No 348-349

25-4-67