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MADRAS RECORD OFFICE.

Government of Madras.

Revenue

DEPARTMENT.

G.O. No. 4329

~~Press~~
Mis.

Original

Dated 14-7

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GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

Irrigation.

READ—the following papers:—

Proceedings of the Board of Revenue (Land Revenue), dated 14th May 1890,
Mis. No. 3033.

THE HON. J. GROSE.

Read—the following letter from A. T. ARUNDEL, Esq., Collector of the Kistna District, to the Secretary to the Commissioners of Land Revenue, dated 20th March 1890, No. 1923:—

I have the honor to lay before the Board and Government the urgent claims of the upland taluks of this district for a careful attention to their needs and capabilities in major irrigation works.

2. The delta irrigation under the Berváda anicut has not unnaturally for many years absorbed almost the whole time and attention of the Superintending Engineer and his staff, and the Board is aware that I have devoted a good deal of care to the zemindari tracts of that area for the last two years with considerable advantage to the revenue, and am therefore not likely to undervalue its importance. The ultimate area to be irrigated in the Kistna delta is 475,000 acres, while the area actually irrigated still falls some thousands of acres short of 400,000. With works estimated and provided for which will eventually add to the irrigated area 80,000 or 90,000 acres, carrying three or four lakhs of rupees water-tax as additional revenue, it is not to be wondered at that the needs of the upland taluks in tanks and anicuts should have escaped attention, with the result that these extensive tracts have been far more neglected than if they had belonged to less fortunate districts.

3. More than twenty-three years ago Mr. Thornhill, when Collector of this district, submitted to the Board a list of some upland irrigation works greatly needed. Of these only one, the Peddakancherla tank in Vinukonda, was ever attempted. It was restored at a cost of Rs. 16,187 and now irrigates 421 acres paying a water-tax of Rs. 1,616.

4. In 1870 Mr. Boswell, then Acting Collector, sent in a further report of works of irrigation needing attention, and it is recorded in Board's Proceedings, No. 1722, dated 14th March 1870. The vicissitudes of one important work in this list, viz., the Dondapad tank in Vinukonda taluk, fed by a stream from the hills with a catchment basin of 40 to 50 square miles, is typical of the neglect I have referred to.

5. In 1868 Colonel (then Lieutenant) C. J. Smith, R.E., made a careful investigation into this project. His estimate for its restoration was Rs. 37,100. It was found that 1,300 acres would be brought under irrigation immediately—the ryots having executed agreements thereto—and that 500 acres more were available. A return of Rs. 5,200 or 14 per cent. on the outlay was to be anticipated almost from the outset.

6. The scheme thus favorably reported on was approved by one Superintending Engineer after another, but nothing was ever done. Once by a kindly fate Rs. 10,000 were allotted to begin the work, but the allotment lapsed, and the ruined reservoir is now in the same condition as it was when Colonel Smith reported on it. A remark in the District Manual led me to visit it early in 1888, and being much struck by its promising character, I obtained the record and early history of it. I of course begged the Superintending Engineer, Mr. Hannan, to visit it, but it was not till the close of 1889 that he was able to do so, and we then went over it together. Mr. Hannan has endeavored to depute a subordinate to revise the plans and estimate and informs me that he hopes this preliminary work will begin at once. The fact remains that this valuable and remunerative irrigation work, approved by a series of Engineers and once even provided with funds to begin repairs, has remained untouched for nearly a quarter of a century since it was formally recommended for restoration.

7. The Vinukonda taluk contains other large schemes which I have not yet personally examined, but *en route* to Palnád occasion was taken to visit a valuable tank at Ipur, which breached thirty years ago and has not been touched since. It has a catchment basin of about 30 square miles, the sluice is in good order, and there are no difficulties about its repair. I hope, if the Superintending Engineer approves the plan and estimate, to take this up as a minor irrigation work, as the nominal ayacut was said to be about 200 acres, much of the water passing away to supply a large tank below which was breached at the same time and so remains.

8. Passing on to the Palnád taluk, another and a far more important work referred to in the Board's Proceedings above quoted is the bunding of the river Naguleru at Mellavagu and the formation of a lake some miles in extent. This scheme was examined and favorably reported on by Colonel C. J. Smith in 1868, but his report is believed to have been lost in transmission to the Superintending Engineer and not to have been placed on record. The river has a catchment basin of about 100 square miles, chiefly in the hills, and never runs dry. A gigantic dam, 60 feet high, was erected by native rulers almost across the narrow gorge in the hills through which the river escapes, and a hill-ridge a mile away was cut down 50 feet with a view to form a calingula. The scheme was never completed. The country from the hills to the river Kistna falls away in a natural slope well adapted to irrigation. At least 4,000 acres of irrigation may be expected from a completion of this project. I have had contours and levels taken in some detail for the work, and the Superintending Engineer arranged to inspect it in March, but other imperative duties consequent on the tour in the delta of the Chief Engineer for Irrigation have prevented Mr. Hannan from carrying out his intention for the present, and I fully recognize and endorse the prior claims on his attention of the important works under execution in the delta.

9. At Atmakúr, in the same taluk, the Vedimangalam river, with a catchment basin equal to that of the Naguleru, passes through an upland ridge at a place that suggests the formation of a considerable lake with less engineering difficulties to contend with than on the Naguleru. The land below is well suited to irrigation.

10. At Macherla is a great ruined tank supplied by the Chendravanka stream which has a catchment area of about 40 square miles. Taking 37 acres of irrigation per square mile of catchment basin—a figure furnished me by Mr. Hannan—and considering the size of the tank, an area of over 1,400 acres should be irrigated. There is a single wide breach in the bund and the principal sluice must be rebuilt; the great calingula is in good order.

11. At Gurazala, or rather at its hanlet of Jangameswarapuram, is a large ruined tank supplied by the Dandivagu, a perennial stream, which has a catchment basin of nearly 50 square miles. The surplus used to supply the Gurazala tank. Another 1,000 acres may be irrigated from this work.

12. The Yerravagu, where it debouches from the hills from a catchment basin of about 12 square miles, can be utilized to form a tank for the irrigation of Guttikonda, and lower down from a total catchment of about 40 square miles can again be utilized to form a tank for the irrigation of Konanki and other villages.

13. Other smaller schemes which I have also inspected might be added, but enough has been said to show the need there is for a careful professional investigation of the capabilities of this single upland taluk of Palnád which I do not pretend to have more than partially examined. It may be noted in passing that the rivers and streams above referred to combine to swell the floods of the river Kistna at a time when it is passing high over the Bezváda anicut. The storage of these waters, if it had any perceptible effect at all on the river Kistna, which is doubtful, would enable the Engineers to add something to the river flow in dry seasons.

14. In the foregoing remarks I have not dwelt on other important schemes which I know to exist in the Vinukonda and Nandigáma taluks and to have been viewed with favor by former Engineers, but of which I have no personal knowledge. The half-dozen works that have been specified, if it be found practicable to complete them on remunerative terms, would bring in an additional revenue of half a lakh of rupees or more in water-tax. But this sum means at least two or three times the amount added to the wealth of the people and their means of subsistence. The water-supply on which the works depend is fed from the hills, and is so abundant that a considerable portion of the irrigated area would be permanently protected against famine.

15. It is on these grounds that I venture to urge upon the Board and Government the claims of these taluks to prompt and serious attention without detriment to the more concentrated and remunerative works in the delta. The ryots of the uplands are many of them comparatively poor, they are unprotected from drought and famine, and have little to fall back upon if the rains fail. Means undoubtedly exist, as I have proved in one case and have reason to believe in the others. I have mentioned, by which Government through outlay remunerative to the revenue can afford at least a partial protection, and I think it is unquestionable that such protection ought to be given.

16. If the view I advocate is accepted, it will be for Government to say in what way the schemes I have put forward and others of equal value may best be examined, and if approved, carried into execution. The formation of a Tank Investigating and Restoration Party to this district would no doubt be the best plan, for it is obviously impossible for the Superintending Engineer to give the time and attention necessary for the undertaking. If no party is immediately available, I would urge that "a temporary establishment" be employed similar to that which "has been placed at the disposal of the Executive Engineers of the Godáviri Eastern and Western Divisions for the investigation of the requirements of the tanks of the Godáviri district" as noted in the Administration Report, Public Works Department, Irrigation, 1888-89, page 67. I beg leave to request the support of the Board to this course as the minimum that should be sanctioned, and would urge that a complete Tank Restoration Party should follow as soon as practicable.

Resolution—dated 14th May 1890, Mis. No. 3033.

Submitted to Government. The Board supports Mr. Arundel's proposals and hopes that at an early date the Government will be able to order a re-examination of the various irrigation projects alluded to.

(True Extract.)

(Signed) M. HAMMICK,
Secretary.

No. 3543, Revenue.

Transferred to the Public Works Department.

OOTACAMUND,
10th June 1890.

(Signed) C. A. GALTON,
Secretary to Government.

No. 92 I.

Note by the Chief Engineer for Irrigation.

With reference to Resolution of the Board of Revenue, Mis. No. 3033, dated 14th May 1890, received with endorsement No. 3543, dated 10th June 1890, of the Revenue Secretary, the Western Division, Kistna, has upwards of 5½ lakhs to spend on works in the current official year, and none of the staff sanctioned for the division can be diverted from what it has to do in utilizing the grants, to the investigations suggested by the Collector.

2. The arrangements connected with the Tank Restoration Scheme in the current official year have already been made * and I would not advocate their being altered, but in next official year a party such as those now working under the Godavari Executive Engineers may be provided to work under the direction of Executive Engineer, Kistna Western Division.

OOTACAMUND,
14th June 1890.

(Signed) G. T. WALCH,
Chief Engineer for Irrigation.

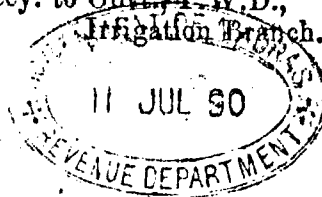
To the Acting Secretary to Government,
Public Works Department.

ORDER—dated 30th June 1890, No. 363 I., Public Works.

The Government considers the suggestions of the Collector of Kistna to be of great importance and directs that next year a Tank Restoration Investigation Party shall be sent to work in the upland taluks of the Kistna district, whilst for the investigation of such of the schemes mentioned by Mr. Arundel as lie outside the scope of the ordinary tank restoration operations and as seem most promising, an Assistant Engineer, with the necessary establishment, will be placed at the disposal of the Superintending Engineer, II Circle, as soon as available, which will probably be in October next.

(True Extract.)

Under-Secy. to Govt., P.W.D.,
Irrigation Branch.



To the Superintending Engineer, II Circle.
" Chief Engineer for Irrigation.
" Chief Engineer, General Branch.
" Examiner, Public Works Accounts.
" Revenue Department.

Exd. G. A. Lewis.

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IRRIGATION.

Govt. of {1890} Madras.

PUBLIC WORKS.

Dated June, 30th.

Recd.

Encl.

G.O., 30th June 1890, No. 363 I.

JUNE.

Mis. C.O. 14329 D/14 July 1890

Communicated to the
Commr. of Land
of Revenue.

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to the Commr. of Land
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Irrigation Works in the Kistna
District

Passing orders on the suggestions of the
Collector for the investigation of certain —.

G.O. 10-6-90

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