M.R.O. 1—77,006—8-6-37.

(1) Number of pages_____

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(3) Initials of the Referencer_____

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 2686 Press Mis.
235-236

Dated 15-11- 1872.

Not to be folded or roughly handled

Annts

No 222

Note by the Acting Supt Engineer for Irrigation

On the Letters noted in the margin Major Beckley replies to

No 77 of 28 June 1872.
No 171 of 5 September 1872
No 204 of 25 —"— 1872

G.O.s No 254 of 25 April, and No 2140 of 9 September

With the first letter Major Beckley submits abstracts of the Inspection Reports showing the manner in which he has been employed since June 1868, when he first commenced investigations relative to Irrigation Projects in Ganjam and Vizagapatam and he points out that the investigations upon which he has been employed have not absorbed the whole of his time and attention, but that he has, in addition to those duties, exercised a degree of Control over the Executive Officers in

in Ganjam, which has relieved the Superintending Engineer in no inconsiderable degree of the duty of supervision over that District and has enabled the latter to devote his time and attention more entirely to the Godavery and Vizagapatam Districts, which in themselves, it need hardly be remarked, form a charge, the requirements of which, one officer, however able, is physically unable to meet.

2. With letter No 171 Major Beckley submits statements showing the expenditure incurred in investigating projects but he has not been able to apportion the expenditure to each individual work on which he has been engaged; but has shown, generally, that while the investigations in connection with the Rosh kondia Project (interrupted as they have been by the duties of supervision of Public

Public Works adverted to in the para above) had occupied him for 3 years and 6 months up to the end of July 1872, the investigations in the South of Ganjam had occupied him for 6 months and the Vunnadara Project for 2 more. Judging, however, from the inspection Report it would appear that the Vunnadara Project had occupied Major Beckley for at least 4½ months; while his time must have been altogether occupied for at least 6 months by his duties in connection with the Department Public Works when acting as Superintending Engineer of the 1st Division when in charge of an Executive Range, when reporting on works in Range No 3 of Vizagapatam and on the damage done by the Cyclone & when engaged on

* { In September & October 1868 / In April 1869
° In July & August 1869
* November & December 1870

in famine works in December 1871 and January 1872, it would thus appear that Major Beckley has been employed for 3 years on the Ross Khorlia Project but during that period he has been engaged on incidental duties connected with the Department Public Works the extent of which cannot be judged of from the abstract of his Inspection Reports.

3. Three years appear to be a long time in which to be engaged in the investigation of a single project of the nature and extent of the Ross Khorlia Project, but, it must be borne in mind that the Project comprised the search for Reservoirs in the valleys of three Rivers containing an area of about 2000 Square miles that no less than 6 sites for Reservoirs must be surveyed

In Report in Q
2553 of 27 October 1870.

surveyed or contoured and approximate estimates for them prepared, that the Country through which the Canals are to pass is by no means an easy one, that there was no information relative to this Country when the investigations were commenced and that a large quantity of work consisting of trial levels, for alternative lines, had to be performed before the lines finally selected could be determined upon: Again it must not be forgotten that there have been no less than 4 Chief Engineers for Irrigation since the investigations were commenced, that each of them had to make himself acquainted with all that had been done, before he could afford assistance to Major Beckley and that there were points relative to which the latter

latter required instructions which could not be decided except after a personal inspection of the localities.

4. Major Beckley's preliminary Report on the investigations upon Irrigation Works in the North of Ganjam is dated as far back as the 8th November 1868. His original Report accompanied by estimates for Canals only was dated 28th August 1869, further information was called for and estimates for Reservoirs were submitted in May 1870. Early in 1871 Lt. Colonel Mullins visited the Ganjam District and, from what he then saw, he was induced to modify the views he had originally formed relative to the Project and proposed a new scheme as it were. The late Major Ryves succeeded Lt. Col Mullins in March 1871 and appears to have adopted Major Beckley's rather than Lt. Col Mullins'

× Irr. GO 247 of 27th January 1869

Irr. GO 441 of 8th February 1870

Irr. GO 2553 of 27th October 1870

para 6 and 16 of note. in GO 789 of 16 March 1871.

views relative to the Project and proposed to visit Ganjam to decide upon most points but was prevented by illness from doing so; I succeeded Major Ryves late in September 1871 and was unable to visit Ganjam till early in January 1872, having in the meantime carefully looked over the papers and plans returns and from the latter and after consultation with Major Beckley I came to the conclusion that while Dams were required both in the Mahanadee and Rushikulia, Reservoirs were necessary in the valleys of both Rivers and it was proposed to place the Reservoirs in the valleys of tributaries of the Rivers.

5 Estimates for the complete project have now been submitted that amount to Rs 17,84,805 but Major Beckley states in his

his Report that nothing has been allowed for administration, for land or for compensation for property submerged and that, when these are provided for, the estimate will probably amount to 22 lacs and if worked on rapid at enhanced rates will perhaps amount to 25 lacs. From rates recommended by Major Beckley for the supply of water he estimates the total return at not less than 4 lacs or 20 per Cent on an Expenditure of 25 lacs. Information relative to compensation for land and to returns from Irrigation must be obtained from the Revenue Department before the question of the probable returns from the Project can be estimated; I shall revert to this subject hereafter.

10 September 1872

Rupees 3 per acre for Government land & 2½ for Zemindar land.

The

6. The other Projects on which Major Beckley has been engaged are

1st The Vamvkadara Project. An Estimate for this Project was submitted by the Superintending Engineer 1st Division in May 1871 it provided for an Anicut across the Vamvkadara at Veeramandalam, with Channels from it. The Superintending Engineer was of opinion that irrigation and navigation might be combined and advantage be taken, for this purpose, of the waters of the Nongolia and a Canal be carried down to the Port of Bunlipatam. Major Beckley was of opinion that the smaller project should be carried out first, the more so, as a great part of the Canal from the Nongolia to Bunlipatam would have passed through Zemindar land the Proprietors of which appear to be disinclined to pay for water through

Rs 305,400

No 153

No 743 5 June 1871

glad

glad enough to avail themselves of it, and nothing further appears to have been done, the Superintending Engineer having apparently retained the estimate till he could find time to visit the locality. The estimate provides approximate sums for Masonry works & details for the Channels only, the papers in connection with this project were sent for when Major Beckley was placed in direct Communication with this Office by GO № 1557 dated 27 June & were received on the 7th September but have not been looked into.

№ 2006 V
29 August

7. Major Beckley has also reported (2nd) on the Jayammgalum Channel from the Godahollow and has submitted a Survey and longitudinal sections and a rough estimate for a Canal from the Rosshkholia near Aeka to the Port of Ganjam

№ 45 V
8 June 1870

Ganjam; as it is proposed to make the Irrigation Channel from the Rosshkholia navigable this Canal will not be required, but, the information afforded will be useful in connection with the improvement of the Jeyammgalum Channel.

8. Major Beckley has reported on the following works, the nature & extent of the information afforded is given in his № 127-9 August

(3) The Chilka Lake Canal
(4) The Ganjam and Gopalpore Canal
(5) The Kovathoty Tumpera
(6) The Haradara Channel
(7) The Boary Reservoir
(8) The Kovathoty or Mullada Tumpera

9. The last project is now being investigated: it will be observed that some steps were taken relative to the investigation of this project in 1868 or 69 but the

the probable return from the work was so discouraging that the Project was dropped & was only taken up again after the failure of last year.

para 6 of letter 29th August

10. In letter No 204 of 25th September Major Buckley explains that it was by an oversight he did not submit a supplemental estimate of Establishment required to complete the investigation on which he was employed - he had expected that the work remaining to be done, after my inspection in January, would have been completed by the end of July but the work has taken longer than he anticipated and he now applies for an establishment up to the end of November, when all information to be obtained from him relative to the Rosshkoolia Project will have been procured and the Mullada Trumpan Project will have been matured and submitted. I request therefore that the Establishment applied for in my Note of the 29th August may be sanctioned.

11. Major Buckley has for some time been far from well and has visited to avail himself of the furlough which is due to him and he purposes to proceed on furlough in November; if further information relative to the Rosshkoolia Project is not required, as I am suggested on the Perryaur Project, the examination of which has proved to be far more arduous than I had expected and as Lt Colonel Mullins returns in November I shall not be able to undertake the examination of the Rosshkoolia Project, it is not probable however that any further information on Engineering points will be required and I would have no objection

objection to Major Beckley's proceeding on furlough in November.

It is true that but little of a really practical nature has been done so far as regards the investigation of Projects in the Vizagapatam District; but it appears to be utterly useless to investigate Projects in a District like Vizagapatam a great part of which is not the property of Government until some arrangements have been entered into with the Enamdars, Zemindars &c relative to the returns to be obtained for water supplied and until the Revenue Survey has been completed and the Revenue Settlement Department has fixed the rates which may be obtained if water is supplied. If a Survey for a Project is once commenced the Zemindars Enamdars &c appear to consider that the work will be carried out and will not enter into any agreement relative to payments to be made for waters received and the Revenue Officers appear to be unable to afford information relative to probable returns or to the value of land to be taken up till the Revenue Survey and Settlement Departments have completed their work in the District as will be observed from paras 12 & 13.

See Letters E F G H & I Enclosures to No 123 of 6 August 1872 from Major Beckley

12. As regards the Roshroolia Project Major Beckley states that he has not been able to submit the land and Revenue returns which have been called for from the Collector and this, though the Project has been for four years under consideration: & have learnt subsequently that some rough Estimates of the value of land that would be submerged in the Baraconda Reservoir were received from the Collector last

para 5 of L 77 of 28 June

but they were returned some obvious errors in the estimates being pointed out and that no further information has been received on the subject.

13. When in Ganjam I addressed the Collector in January last relative to the subject of the rates which might be charged for water, if a continuous supply were provided, but have not yet received a reply. Again the returns furnished relative to the lands to be supplied in the Vegavy Valley from the Penyaur Reservoir were obviously so faulty that I was obliged to return them for revision. Under such circumstances it is impossible to calculate with any degree of accuracy what returns Irrigation Projects are likely to yield: it appears to me to be premature to undertake the investigation of large Projects such as the Vizagapatam Revenue till the Revenue Survey & Revenue Settlement Departments have finished their work in the Vizagapatam District.

14. I would suggest that the Revenue Board be requested to urge the Collector to furnish the information relative to land to be taken up and of rates to be obtained for water supplied from the Ross Khoolia Project on the requisition from the Executive Engineer and from myself with the least possible delay.

15. I enclose a Copy of a Letter from Major Beckley in reply to the Collectors Letter of 12 May 1871 No 500 in Proceedings No 70 8 June 1871 Revenue Department No 2667 of 3 July 1871.

I also enclose an Extract from Major Beckleys Report on the Ross Khoolia Project para 6 of Report of 10 September 1872 from which it would appear that the Revenue Board have directed that in estimating

estimating probable returns of Canal Irrigation a deduction must be made of increase of Revenue that would naturally occur at the next settlement were there no Canals. The principles upon which this increase is to be calculated may perhaps have been explained by the Board, but it appears to me that the matter can only be disposed of by the Revenue Settlement Department and this may account for the delay on the part of the Collector in supplying the information required - if so, I would suggest that in the case in point this calculation may be omitted. If Major Beckly is correct relative to the rates levied in the Purlakimedy estate under the recent settlement there can be no reason why lands, in no way inferior to, and better supplied than those in Purlakimedy should not be taxed as highly as the lands in Purlakimedy,

para 7 of
to 10 of 8
June 1871.
para 5 of
Report of 10
September 1872.

and if so taxed the Rosshkolia Project would be highly remunerative and would yield upwards of 25 per cent on the outlay estimated.

16. If middle men exist to the extent Major Beckly apprehends and if the share of produce is divided as he states it is not difficult to account for the apparent reluctance on the part of the middle men to the improved outturn which a permanent supply of water would secure and there may be some difficulty in raising the assessment or levying a water tax without unduly oppressing the Ryot, or actual cultivator, unless he can be protected in some manner from the Exactions of the middle man or Proprietor.

Dotacamund
10 October 72

Major R.E.
Offg Chief Engineer for Irrigation
To The Secretary to Govt
PW Dept.

Special Executive Engineers Office
No 77. Chittoor the 28th June 1872

From The Executive Engineer
On Special Duty Ganjam

To The Chief Engineer
For Irrigation

Sir, With reference to recent orders passed by Government Concerning investigation of Irrigation Project in the Ganjam and Vizagapatam Districts, I have the honour to inform you that I hope to send away Rookkoolia Project in about a month, it has taken longer than I anticipated when you were here, but when one begins making even small alterations in works connected with each other in all probability every thing has to be done over again, at any rate I find it the case in this instance; plotting all the levels that have been taken from first to last also a tedious operation as they have the first plotted on a large scale and then reduced; and some delay has been occasioned by sickness of Employees, the Government may be assured I am very anxious for many reasons to get the Project off my hands and that the work will be finished as quickly as is feasible -

2. As remarked by the Government I

1525

To The Secretary to Govt PWD

Sir, With reference to the Chief Engineer's letter No 3223 dated 11th October 1872 Accd 28th Decr 1872 I have the honour to report for the information of Government that the Rookkoolia Irrigation Project has been completed and the Sluices opened for the admission of water on the 15th Instant.

No 222

Dated 10th December 1872

Executive Engineer
On Special Duty Ganjam

No 2225

was appointed to this District about five years ago, but being at the time Acting Superintending Engineer of the Godavery have only been up in these Northern Districts a little over 4 years. I enclose abstract of Inspection Report shewing how my time has been occupied.

3. When I left the Godavery the Range Officers of the Ganjam District were directed by Superintending Engineer to receive orders from me as coming from himself so that in addition to Special inspections and reports I have throughout exercised some Supervision and Control over the Public Works in the District and in all probability have saved the Superintending Engineer 3 or 4 visits to Ganjam that could only have been made to the detriment of work in the Godavery so that these investigations have not absorbed the whole of my time.

4. It will be seen when the plans Surveys &c are all received that a large amount of work has been got through, there were no Civils in the District when I arrived and no information of any kind of much value; so that had I been left entirely to myself to devise a scheme to irrigate a large tract of Country a great deal of time must have been expended in Examining the Country and preliminary

preliminary Surveys but naturally the Amount of work with Negative results that has thus got through is much increased when many people have been Consulted as to the best way or any way of doing that which can be done in many ways; of course a Chief Engineer has too much to do to be able to be present at every place precisely when he is required but I think time and labour would have been saved had the Project been worked out less in detail until inspected by a Chief Engineer, and of course time would have been saved had the minute Surveys of Reservoirs been postponed until the Construction of the River Channels had been Commenced. I proposed this but the Government decided it were better to have the whole Project Complete and Comprehensive in plan before Commencing work.

5. In saying I hope to send in Project in about a month. I do not include land and Revenue Returns that have been Called for from Collector.

I have the honor to be
Sir
Your most obed. Servant
J. Rowney Captain RE
Executive Engineer and Supt.
Dist. Ganjam

Special Executive Engineer's Office
Shellerpore 9th August 1872.

No 127

From Captain F. Beckley R.E.
Executive Engineer Cuttack Spl Divn
Cuttack.

To Captain R. F. Cathcart R.E.
Chief Engineer for Irrigation

Sir,

In Reply to part of your letter No 121 dated 10th July 1872. I have the honour to inform you that:

Chilka Lake Canal. 1. The Canal between Chilka Lake and Rooshkolia Backwater Commonly called Gangamari Chilka Lake Canal was commenced in 1866 as a famine work; when I first came to the District by Special desire of Superintending Engineer I made an inspection in detail and reported on the work; from time to time also I have inspected the Canal and given my opinion to the Superintending Engineer Concerning it; after the work had been stopped for 2 years, it was re-commenced in 1871 again as a famine work, I was ordered not to interfere with these famine works to the detriment of progress with Rooshkolia Project; I have lately therefore only inspected the Canal a few times on Sundays; the work is under the Management of the Executive Engineer of North Range.

2.

Executive Engineer's Office
Cuttack 20th August 1872.
Received 12 Sept 1872
No 1001

P.W. 5281/72.

Forwarded in duplicate for submission to Government with reference to my letter No 127 dated 9th instant.

By order of the Executive Engineer
F. Beckley
Captain R.E.
Executive Engineer
Cuttack Spl Divn

Ganjam and Gopalpore Canal—

2. The Ganjam and Gopalpore Canal Survey was made under my Supervision and I checked the two Estimates one providing for a Tidal Canal the other for a fresh water Canal with Locks but the work was sent to the Superintending Engineer by the Executive of the Range, not through my Office. Lieut.t Colonel J. Mullins R.E inspected the line of Canal and also Chilka Lake Canal Considering that the advisability of making the Roorkolia Canal has a= =ble is dependent in great measure on the Coast Canal, there is no doubt I think the Canal from Lake to Ganjam must be Completed to afford an outlet for the produce of Eastern Side of the Mahanuddy (Kuttack) Delta but unless unhappily necessary as a relief work the Canal from Ganjam to Gopalpore might wisely be postponed for the present, and not Considered but in Connection with its prolongation further South, it is Comparatively Easy to get into the Gopalpore Backwater but immediately to the South would be a very heavy Cutting at one point 70 ft deep. there is a Cutting between Gopalpore and Ganjam 30 ft. deep probably it would be best to avoid these Cuttings by working round. — with a high level Canal Supplied from Roorkolia Canal with a branch down to Gopalpore, but nothing can be

fairly Considered until the Roorkolia Project is decided upon, though naturally in Coming to a Conclusion regarding that work the Coast Canal as it may be will not be lost sight of; levels along the lines of these Canals you will find in the General Map that will shortly be forwarded to you. the Canal proposed South of Gopalpore I have had nothing to do with, the Survey has been made by the Executive of the Range acting under orders from the Superintend= =ing Engineer.

Koratholy Jumpara—

3. The Koratholy Jumpara is a badly situated — shallow tank that however when full Covers a large area, the high and low water Contour were surveyed but not in a Satisfactory manner as also some Channels leading into and out of this Tank. the Siege of the Tank may be judged from the General Map, there are Constant disputes regarding the height to which the water should be held up, the bed and Margin of the Tank is very valuable land, were the Roorkolia Project fully Carried out the Jumpara should be drained and bed re-claimed irrigates a Considerable tract of Country in Connection with the Jeyamungalum Channel from which it receives a very large and almost Constant supply during the Rains.

Jeyamungalum Channel—

4. This Channel was surveyed in Connection with a.

a havigable Canal that might be made from Rookkolia Canal near Aikka to Port of Ganjam Crossing the Godahallow a little below Sigelly. The Survey and Longitudinal Section and Rough Estimate of this Canal were sent to the Superintending Engineer with my letter No 45 dated 8th June 1870. I dont think the receipt of it was ever officially acknowledged, but Colonal Mullins M.E alluded to it when here. I only took it just to shew roughly what it would cost but did not wish the Rookkolia Project to be encumbered with it; if the velocity in the other Canal were considered an objection all boats might eventually go up the still water Canal; the Jeyamungalum Channel requires to be reformed with reference to Irrigation only, its usefulness is curtailed by bunds in the upper portion, were these bunds not made, the low land there being otherwise irrigated, the irrigation might be Extended and improved from the lower portion.

Heradaraa Channel } 5 I have gone over but no levels have been taken along this Channel leading from Left Bank of Rookkolia opposite Sigelly above Poorshotapore, this Channel requires reforming and Extension, it also leads into a Lumpara or Jheel, the Ryots of Poorshotapore pay only 2 Rs per acre for very fine alluvial land, the Ryots the last season of

1871. Said they would pay more if the Channel were put in order, but there appeared to me no guarantee that if some thousands of Rupees were expended the Rate would be raised although 2 Rs for 1st Class land must be Considered simply dry Assessment; I therefore wrote to the Superintending Engineer stating what might be done and he stated my dilemma to the Board of Revenue who I understand called for a report on the subject, this is certainly not a solitary instance, hundreds of small works are kept in repair the lands under which are assessed at dry rates, and much useful work is left undone because no water rate is levied, were I the Executive I should ask for distinct orders and understanding on the matter before I sanction Estimates for repairing such works; Ryots here appear to perform them less in the way of Kudi-Maramut than anywhere else in fact as a rule do nothing of such repairs

Kora Kor or Mullada Lumpara Project } 6. The Mullada Lumpara Project is a proposed restoration of a ruined Weir across the Horatory River and channel leading into a Lumpara or Marsh above Ganjam; irrigation would be obtained both from Marsh and Channel direct; Soon after I came to the District a Survey and Levels (not-

(Not very accurate) were taken round the Tunipara and up the supply channel & the weir with Cross Sections of the Channel. I sent the Project & the Collector for Revenue details, there is apparently less than 1000 Acres of Government land and some 30 or 4 thousand Acres of Zemindary. the Government Ryots refused to pay 4 Rs per acre but offered something not I think Exceeding the Amount 1 Rs per acre; the Zemindar appeared inclined to pay nothing so naturally the matter dropped until 1871. when another failure roused the ryots and made them Exceedingly anxious for the work and at one time it appeared as if the Bereds Zemindar would come & fair terms by the persuasion of Mr. Thornhill M.C.S. Member Board of Revenue but I have heard nothing lately of probable returns from this work if Executed; as I was told & confine myself to the Rooshoria Project and the Executive Engineer had an Assistant Engineer Mr. Brickwell at Gunjam I handed the project over to him in February last, and had hoped it might have been Completed ere this it has however I understand progressed but very little; it is a small work and if I could get the Rooshoria Project off my hands ——— and the weather were favourable the Plans might be quickly Completed; but of course nothing Can

16

be done in the way of work unless the Revenue Authorities are able to levy a fair water rate. The sooner the idea that remunerative irrigation works can be Constructed with a water rate of 1 Re per acre is dissipated the better: though without doubt it might be desirable to Construct works getting little directly in returns, but saving the land Revenue and avoiding the misery Expence and Loss attending Famines; the plea of the Town of Gunjam Ryots that they cannot afford to pay for water is somewhat ludicrous; Considering they are again ploughing their lands after loosing the whole Crop in 1864, 65, 71 and half Crop in 1868 at 25 Rs per acre per Crop this Amounts to Rs 87.5 per acre and Re = presents a Capital that even at 5 per Cent would pay Rs 4 per acre for water, they have got to get.

Boary Reservoirs

37. The Reservoir Embankment was originally far too weak but has been strengthened from time to time, it was difficult to make the Bund strong at first as a high percentage on Cost was demanded by Government before the work was sanctioned; and only a rate of 1 Rs per acre Could be levied this is paid for 1200 acres which however are not entirely dependant on Boary Reservoirs for water and the Rich altogether on this Land is

is higher than any where else in North Gangam
Amounting to Rs 4 per acre but there a great part
is under Sugar Cane Cultivation that in India
is seldom assessed under Rs 10 and often as
high as 25 Rs per acre. In bad years perhaps
the Revenue derived from Bourg Reservoir
is fair but in favourable years a great quantity
of water passes on to so called "Rain-fed lands".
There are two sluices one leaked very badly but
was repaired according to an Estimate I made,
and is now in good order, lately 90 ft of the bank
was strengthened and puddled in a part where
it was accustomed to leak; the Reservoir this
year has filled and a large surplus has flowed
off. Mr. Lever the Assistant Engineer in charge
reports to the bund as this all right. The soil of
which the bank is composed is hard red soil is
mixed with gravel or decomposed rock; the
greatest permanent depth of water is 25 ft there is
no regular waste weir it discharges through Boulders
and over a saddle that forms a natural and
Capacious but very irregular waste weir,
the greatest depth of permanent water is 25 feet
and it has when discharging round saddle been
nearly 27 ft or little more than 5 ft below top of
Bank

Bank the slopes are fully 2 to 1 I think the
Bank should be raised 3 ft and the top should
be 10 ft broad and should have sent in an Estimate
for doing this but until very lately, understood
that 25 ft was the greatest depth the water had
ever stood at. I have ordered Mr. Lever Assistant
Engineer to keep it below that level if possible.

I have the honour to be
Your most obed Servant
T. Buckley Captain RE
Executive Engineer Bundelkhand
South Gangam

Special Executive Engineer's Office

No. 204. Camp Beredy Gopaulpore
25th September 1872

From Major F. Beckley RE
Executive Engineer on Special Duty
Ganjam.

To, Major R. St. Oakes RE
Chief Engineer for Irrigation

Sir,

In reply to Government order 9th September 1872 No. 2140. I have the honour to inform you that on 23rd April last I forwarded a "Revised" Statement of Survey Establishment proposed for Ganjam Irigation projects during 1872-73. in which I entered the Office and Survey Establishments for 12 months but the Executive Officer only for 4 months, sincerely hoping at that time that his work would be completed by end of July, however the labour of making alterations and completing the Project was much more than I had anticipated, the reason of my not forwarding a Supplemental Estimate before August, was that I was busy with the Project, and the insufficiency of allotment of Funds did not

Execu-

Accer Line.

2. The Establishment is now applied for up to end of November; it depends on the views of the Government whether it is required beyond that period, I cannot possibly tell now, if the Government consider that the Establishment should then be broken up, I shall be prepared to apply for Furlough, the two Surveyors I have recommended shd be placed on the permanent Establishment as Overseers, the Accountant must return to his substantive appointment but the draftsmen one on Rs 30 and one on 20 Rs have no appointments and I consider they should be kept on upon Rs. 25 & Rs 15 until employment can be found for them, as it is usually difficult to get a draftsman in Bengal and this inconvenience that when men have been pretty well trained they should run off to attack.

I have the honor to be
Sir
Your most obed Servant
T. Buckley Major RE
Executive Engineer &c

From
The Executive Engineer
On Spl Duty Ganjam
To
The Chief Engineer
for Irrigation
No 204
Dated 25th September 1872
Recd
P.W. 5231/2

Explaining cause of delay in submitting supplemental estimate of Establishment required in Ganjam for Survey in 1872-73

Special Executive Engineer's Office
No. 123. Chetterpore 6th August 1872

From The Executive Engineer
On Spl Duty Ganjam

To The Chief Engineer
For Irrigation

Sir, I have the honour to forward some letters &c relative to investigations of Vumshadara Project. Letter A sent to Superintending Engineer 16th May 1871 shews what documents were then sent to him, they include the Report a Copy of which was given to you when in this District. I recommended that an Anicut should be built at Heeramundalum the Creek being 105' + M.S.L. a few feet below highest flood level, from this Weir Channels would be drawn off on either side perfecting Existing irrigation and Extending it to land that now suffers much from want of water; such a work would certainly be remunerative if a fair Kist could be levied from the Government Ryots and the Zemindars also be made to Contribute something, at present they do not pay any thing even towards repairs. although in some Cases the greater portion of land irrigated by a Channel is Zemindary. To get out of the valley of the Vumsh[illegible] we

we should require the water-line 30 ft. higher at Veeramundalum or 135 + M.S.L. this has been discussed with the Superintending Engineer I am inclined to think that at any rate the smaller Project should first be carried into execution, but Nothing more can be done towards it until we obtain Revenue returns that shew with some degree of Accuracy, the areas and Cultivation of land that the Channel would Command, Something also should be decided as to what water rate the Ryots can pay or if they cannot pay any water rate, irrigation projects in these parts should be laid aside once and for all Except as works of Charity, any larger project than the one I have recommended must in great measure be dependent for Revenue on the small Zemindaries to the North East of the Chicacole Taluq. and could only be remunerative if the Zemindary Ryots paid as much as Government Ryots. No doubt it will generally be difficult to induce them to do so the more especially if men in authority like Mr. Carr M.C.S. late acting Collector without Consulting the zemindars Conclude and Officially state their opinions that "a Canal through a Zemindary must be a mere profitless outlay" From my own Enquiries I have no doubt that a water rate Can be levied every where but not a water rate Easily a rate that would make irrigation works remunerative; it is so impossible to get paid back any thing like the value of the water, it is difficult to know what the value is, as no body knows what the land produces per acre in Agri=cultural matters words have no particular meaning; Mr. Graham. Principal Assistant Collector states in his Report to the Collector that a "half Crop means a good yield" in the Chicacole Taluq" so that probably for full Crops they could afford to pay a fair water rate.

2. Letters B.C.D. are Correspondence that calls for no remarks.

To be Communicated to the Board

3. Letters E.F.G.H.I. are Correspondence with Revenue Officials regarding Revenue matters in Chicacole Taluq.

4. Letter J. relates to irrigation works in Vizagapatam

5. Letter K.L. Correspondence with Superintending Engineer.

I have the honour to be
Sir
Your most obedient Servant
J. Bulley Captain R.E.
Executive Engineer
Vizagapatam

Special Engineer's Office
Camp Akka 8th June 1871.

No 40.

From
Executive Engineer
Ex Special Duty, Guyana

To
The Superintending Engineer
Pub Buildings

Sir,

I have the honor to forward herewith
1. Copy of Government Order No 1 dated 20th May 1871 appointing Cossyapalia Mudaliar as Collector and to transact all such business as may be allotted to him.
2. Copy of Government Order No 2 dated 20th May 1871 appointing Cossyapalia Mudaliar as Collector and to transact all such business as may be allotted to him.
3. Copy of Government Order No 3 dated 20th May 1871 appointing Cossyapalia Mudaliar as Collector and to transact all such business as may be allotted to him.
4. Copy of Government Order No 4 dated 20th May 1871 appointing Cossyapalia Mudaliar as Collector and to transact all such business as may be allotted to him.
5. Copy of Government Order No 5 dated 20th May 1871 appointing Cossyapalia Mudaliar as Collector and to transact all such business as may be allotted to him.
6. Copy of Government Order No 6 dated 20th May 1871 appointing Cossyapalia Mudaliar as Collector and to transact all such business as may be allotted to him.
7. Copy of Government Order No 7 dated 20th May 1871 appointing Cossyapalia Mudaliar as Collector and to transact all such business as may be allotted to him.
8. Copy of Government Order No 8 dated 20th May 1871 appointing Cossyapalia Mudaliar as Collector and to transact all such business as may be allotted to him.
9. Copy of Government Order No 9 dated 20th May 1871 appointing Cossyapalia Mudaliar as Collector and to transact all such business as may be allotted to him.
10. Copy of Government Order No 10 dated 20th May 1871 appointing Cossyapalia Mudaliar as Collector and to transact all such business as may be allotted to him.
11. Copy of Government Order No 11 dated 20th May 1871 appointing Cossyapalia Mudaliar as Collector and to transact all such business as may be allotted to him.
12. Copy of Government Order No 12 dated 20th May 1871 appointing Cossyapalia Mudaliar as Collector and to transact all such business as may be allotted to him.

I have the honor to be
Sir
Your most obedient Servant
[illegible]
Special Engineer

G.E. No 528

From
The Exec Engineer
on special duty
Guyana

No 123

Dated 6th Aug 72
Recd 20 Aug 72

Encloses 12 letters
marked A to L
P.W. 5231/72
Forwards some
letters relative to in-
vestigation of Vem-
shadara Project.

Mr. Mudaliar is the very evident fact that in the Gunjam District the assessment both as regards areas and rates requires the most complete revision. I considered it hopeless in estimating returns from Irrigation Works to do much more than contrast the Revenue as it is with what it ought to be; it is true that without said works there ought to be a great increase, but I only reckoned on 4 Rs. per acre whereas for much of the land 6 Rs. would be a fair assessment including water rate, perhaps for much of the land 4 Rs. ought to be obtained without any outlay on Public Works, but judging from the past I do not feel justified in assuming that such would be the case.

4. Accepting the Tahsildar's statement that the Crops have never been lost Mr. Minchin, myself and others can testify that crops must would be watered by the Mahamuddy Canal have looked very bad for want of water, and a glance at the Map and Rain Registers will shew that if dependant on local Rains, they must suffer more or less, the water over the fields can seldom be the right depth and must generally be too stagnant to produce heavy Crops, as stated by Mr. Dalyell C.S. the Yield on rice lands varies 300 per cent, that because land produces rice therefore it ought not to be irrigated is a thin ice (are) an argument

vide his Madras Famine of 1866.

to maintaining that Corn land in England ought not to be manured, if it will produce Corn without it; Some of this land is thoroughly irrigated from the Boary Reservoir, very much more than is to entered in the Revenue Accounts, and naturally the holders are well content to pay their Rs. 1-14-6 and remain unnoticed, none of the water of the Boary Reservoir ought to flow below the line of proposed Mahamuddy Canal, that Reservoir should yield at least three times its present Revenue, a small high level channel is wanted but this and many other works in the District must I think be postponed until the Revenue Survey is completed, village land registers revised and a fair assessment and water cess established.

5. I quite agree with the Acting Collector that it is more than probable we shall have to pay for any Zamindary land we occupy, provision was made for this in the Estimate but certainly a part of the Compensation might be made in land and very easily the whole if some ryots were mulcted of a portion of the land that the Revenue Survey will shew they have surreptitiously obtained.

6. I regret that the Acting Collector should have assumed the Zamindars will pay no water cess and the Canal through their lands be altogether profitless, even in this District under the Boary Reservoir some Zamindars pay 1 Rs. per acre, no doubt there is much gratuitous irrigation but I cannot learn

train that adequate efforts have ever been made to levy Canal water rates. In the Godavary Zamindars pay I believe 4 Rs. per acre, in Orissa 1 Rs and there where artificial Irrigation is of less value than here, it is understood confidently expected the Rates will before long be doubled without coercive measures, that many people consider Government would be more than justified in exercising. We are not however as in Orissa dependent on Zamindars for a Canal Revenue and I think it highly improbable they would for long see water running through their Estates without offering to come to some equitable irrigation arrangements. .....

Experience in the Krishna and Godavary I think teaches us that there is very little hope of the Ryots in a body volunteering to pay a fair water cess; if the execution of a large work is to depend on their votes the Plebiscitum had better been obtained before an Irrigation Engineer was sent to the District, it appears to me unreasonable to doubt being able to obtain a fair cess from the unsophisticated Ariah Ryot who pays uncomplainingly such a heavy Rent to his Zamindar, but in our Talugs the views of the Ryots are largely represented by men holding land not Cultivators but Government Officials or their relations, traders, Merchants &c. whose agricultural duties are confined to subletting their holding & leaving the actual Cultivators 8/16 of the produce for paying the Government the value of about 3/16 and keeping about 5/16 for themselves, I believe there are several reasons why these small proprietors are not very eager for Public Improvements, one reason is, that all increase of Rist falls entirely on their 5/16 shares and they have to pay the whole of the water cess receiving only 1/2 the extra produce.

8. Mr. Gordon Forbes C. S. stated that the Zamindars in Ganjam took 1/2 the produce I believe they do this or else from a village renter 2/5 the value of the Crop in money free of all cost of Collection and after all to outward appearance the Zamindars Ryots are as comfortable as the Government Ryots, their villages are as good their land generally better tilled and Sugar Cane is as largely grown where the rent is 15 or 18 Rs as where it is 3 Rs per acre, in fact there is no reason why Ganjam should be more lightly taxed than other Districts.

I have &c. &c.
Sd/ J. Beckley Capt. R.E.
Sd/ Executive Engr. On Special duty Ganjam.

True Copy
Mo. T. Hutchinson Major R.E.
Ag. Supg. Engr. 1st Divn.

Supg. Engrs Office
Dowlaiswaram
June 1871.



Extract from a General Report on
Irrigation Projects from Bijapur
Deshkhola

[illegible]

5. One may easily understand that a large
part of the present Condition
20 per cent of the Accounts of Supervisors
of the Revenue Accounts of Surveys are
difficult to obtain a clear 10 per cent as
the interest that these works of produce,
nit may reasonably be expected to the
the Board of Revenue in estimating probable
Collector may [illegible] in estimating "
Canal irrigation a deduction
returns of made of increase of Revenue that
must be naturally recur at the next settle
would naturally recur at the next settlement
would naturally there no Canals, under this
ment under there no [illegible] determined
ment quadrupled in the Taluk in the
to one unknown quadrupled in the Taluk
in the principles on which the
determined are communicated, which are
fully

P. W. 5231/72.

Enclosure in a letter
No 1009 dated 20th June
from the Superintending
Engineer 1st Division to
the Chief Engineer
for Irrigation Madras

8 June 72

futile to even guess at what the Canal returns are likely to be. Mr. Carmichael M.S.C. the Collector gave me a rough calculation concerning the area the Canal would embrace as follows

17369 Irrigated at 2-15-4

102852 Rain-fed or dry at 1-5-9 & 1-14-7

20000 waste but cultivable

This return can only be approximately correct and it does not include a large area that the Ittchapore Channel would command parth of a line drawn from Berhampore to the sea bearing about S.E. nor does it include Zemmindary, how considering Ganjam has a fertile soil an ample Rainfall fair roads and a long and near sea-board and that for ages it has been considered a rich District its name Ganj-i-am signifying the "Granary of the North", it must be admitted that these rents are remarkably low, but anyone at all intimately acquainted with the District must know that the condition of the people is notwithstanding extremely unsatisfactory as to whether there will be a famine or not is each year an ever recurring theme of conversation for the people and matter of concern to the Government in the neighbouring Zemmindaries the Ryots are apparently quite as well off and their lands are better cultivated than in the Government Talugs, the rents they pay for dry crops and paddy are about 3 times the Government rents and for sugar cane Rs 15 instead of from Rs 2 & 3 Rs per acre. In Purlah lands according to the recent settlement rice lands pay Rs 7 per acre whilst under the Jeypore Canal the lands better irrigated & more favourably situated, pay only Rs 3 I have no hesitation in saying that with the proposed works a Persian Survey and good management

management the Revenue of the Gomsoor and Berhampore Talugs might be at once doubled and before many years trebled. a Revenue survey is indispensable because so far as I can learn there is not a semblance of any village surveys nor the roughest of rent rolls, so that although we have nominally the Ryotwary system, it must be practically to a great extent the village system, what Each village pays to Government and the quota of each Ryot being all settled according to Mamool. and nothing else, if any attempt is made to raise the Revenue I can hardly conceive that the increase could now be fairly distributed; the rich Middlemen and Ryots would escape paying their fair share the poor ryots would be oppressed and the poor lands might for a time be thrown out of cultivation

X X X

(True Extract)

H. F. Bates Majr R.E
Ag Chief Engineer for Irrigation

June

E

Special Deputation
Inspr's office
Chicacole 30 Septr 1870

No. 116

To
J. Hope Esquire
Principal Assistant
Collector Ganjam

Sir

I have the honor to forward to you a sketch map shewing the country that might be irrigated by channels leading off from weir at Veeramundalum on the Vamsadara, and I shall be obliged if you will give me information regarding the ownership and cultivation and revenue derived from the tract of land in question; in some such form as the following

	Government			Zemindary and Inam			Remarks.
	Acres	Assessment per Acre	Total	Acres	Assessment per Acre	Total	
Irrigated.							
Half ditto							
Dry cultivation							
Waste.							

P. R. 52 1870 2.

Extract from a Report
Bielby Esqr C.E.
Superintending Engineer
Northern Circle.

2. I only require the above information approximately correct; perfectly correct details will probably not be attainable until the Revenue Survey maps are pointed

/Sgd/ J. Beetby Captain R.E.
Executive Engineer in Spl
duty Ganjam

/True Copy/

J. Hobday Captain R.E.
Executive Engineer in Spl
duty Ganjam

To Capt Beetby
P.W. 52 81/12.

F.

Special Dawn the Engrs
Office Chicacole
7 October 1870

No 156.

To
J. Hope Esquire
Principal Assistant
Collector Ganjam

Sir

In continuance of my letter No 146 dated 30 ult: I have the honor to state that I shall be obliged if you will ascertain whether the Inamdars are willing to pay a fair rate for water supplied to them. The sale levied in the Godavery district is 5 Rupees per acre, but as an account of the sandy nature of the soil in the valley of the Vamsadara more water per acre would be required and probably the cost of distribution greater I think myself that a water cess of 5 Rs per acre would not be excessive, this would be for perfect irrigation supplied by proposed channels but a reduced cess would be imposed in case the irrigation was not complete or where the new channels merely supplemented former sources of Irrigation

2. I believe I am correct in understanding that hitherto no water cess has been levied on Enamdars in the Chicacole Taluq, although many of the channels and masonry works have been entirely constructed and the rest much improved during the last 20 years, so that Enamlands have been converted from dry to wet land or former wet cultivation has been much improved, entirely at the cost of Govt. the Enamdars not contributing a single rupee even towards the repairs of the channels that irrigate their lands: there may of course so far as I know to the contrary have been good reasons for irrigating the lands of Enamdars in this District gratuitously, but it is necessary that when proposing to Government the execution of any irrigation works I should be in a position to state how far future irrigation works are likely to prove directly remunerative

I have &c &c

(Sd) J. Beckley Captain R.E.
Executive Engr on Spl Mk
Ganjam

True Extract

Captain R.E.
Executive Engr on Spl Mk
Ganjam

Rs. 52811/2

H

Special Executive Engineer's

C
No 6.

Principal Asst Collectors Office
Berhampore dated 17th January 1871.

To Captain J. Beckley R.E.
Executive Engineer Special
Ganjam

Sir,

In reply to your letter No. 156 of the 7th October last. I have the honor to inform you that Mr. Hope ordered the Thasildar of Chicacole to enquire whether the Enamdars in question were willing to pay the proposed water cess. From the report of the Thasildar in reply to the above order, it appears that the Enamdars are not willing to pay it.

I have the honor to be
Sir
Your most obt Servt
(Signed) J. B. Speedding
Ag. Senior Asst Collr
in charge

(True Copy)
William Captain RE
Executive Engr on Spl Mk

Ganjam

2. I believe I am correct in my order.

H

No. 287.

Special Executive Engineer's
Office Camp Aska
27th January 1871

To

The Principal Assistant
Collector Ganjam

Sir,

I have the honour to acknowledge the receipt of your letter No 6 dated 17th January 1871. replying to 1st para of my letter No 156 dated 7th October 1870. and shall be obliged if you will inform me whether I am Correct in my surmises as expressed in 2d. para of above letter, relative to the Shares. that Inamdars of the Chicacole Taluq have upto the present time taken in making improving and repairing the irrigation works that irrigate their lands

I have the honour to be
Sir
Your most obedient
(Sgd) J. Beckley Capt RE
Executive Engr & ex officio
Dy Collr Ganjam

(True Copy)
J. Beckley Captain RE
Executive Engineer

6 Ls 7/52 Ps 2
P.R. 5231/72.

J

Special Executive Engr
Akola Chicacole

I

No 13.

Principal Asst Collectors Office
Berhampore 28th January 1871.

To

The Special Executive Engineer
Akola

Sir,

In reply to your letter No. 287 dated 27th instant, I have the honour to state that the Ryots in Chicacole Taluq have up to the present time contributed nothing to the Construction and repair of Irrigation works.

I have the honor to be
Sir
Your most obt Servt
(Signd) J. B. Speddeing
Offg Senior Asst Collector
In Charge

True Copy
T. Rubin Captain R.E.
Executive Engineer and Superintendent
Ganjam

P.R. 5281/72.

J

No 111

Special Executive Engr
Office Chicacole
10th August 1870

To

J. Hope Esquire
Principal Assistant
Collector Ganjam.

Sir

I have the honor to inform you that I do not think that sufficient land is available for irrigation to yield a fair remuneration for the cost of building an Anicut on the Vamsadara between Warnoji and Buttily, and Channels led off the River without any weir would not I think afford effective irrigation. I should recommend that further Consideration of this project be deferred until the project I am now engaged upon, has been fully considered.

2 I think it would be very desirable to Construct one or more Reservoirs on the Buttely River with channels along the base of the hills. Such Reservoirs would be entirely independent of both my project and the one alluded to in the first para of this letter. I have &c &c

Sd/ H Buckley Capt R.E
Executive Engr on Spl Duty
Ganjam

(True Copy)

J. Hudson Captain RE.
Executive Engineer Cn
Rl Dty Ganjam

G.S. 1/5284/72
P.R. 2311/72.

K

No. S.S.

Superintending Engineer's Office 1st Dn.
Camp Chicacole 21st March 1871.

35

From Major J. H. Fischer RE.
Off. Superintending Engineer 1st Dn.

To Captain T. Beckley RE.
Executive Engineer Oriya Dty
Ganjam

Sir,

With reference to para 1 of the Revenue Board's Proceedings on your report printed with G.O. of the 7th May 1869. No. 1476 I have the honour to request you will be good enough to report if the irrigation works there referred to are really in an inefficient Condition or the Ayacut has been ever Estimated.

2. From all I have seen of these districts I consider the irrigation works never have been properly Constructed the people certainly not appearing to understand this matter here as they do in Bellary or Caddapah more miserable tank bunds it would be difficult to produce.

3 If necessary I should be obliged by your instructing the Range Officers to make special Surveys of works which can be improved shewing their present Condition the proposed alterations and any additional Extent of land which can be brought into Cultivation

I have &c
(Sd) J. H. Fischer Major RE
Supt Engr

(True Copy)
J. Hudson Captain RE

L

No. 55.

Special Executive Engineer's Office
Camp Attock 19th May 1871.

To

The Superintending Engineer
1st Division

Sir,

In reply to your letter No 88. dated 21st March 1871 I have the honour to inform you that I believe that the irrigation works in this District have never been more Efficient Condition than now. I cannot learn that there is any reason to suppose that the Revenue has decreased from want of repair to Tanks or Channels &c.

2. I believe the whole assessment of this District requires to be thoroughly revised. I have no belief in the Correctness of the Areas of irrigated land as entered in the Revenue Accounts and the rates are generally too low in many cases ridiculously low, moreover rain lands dependent on rain, or hill streams and on tanks are so mixed up that it is often difficult to rightly Estimate the value and influence of a Tank or Channel. I think any attempt to materially improve the irrigation works in this District must result in failure and be unremunerative until the Revenue Survey has been Completed and the lands re-assessed.

3. All throughout the District I am inclined to believe that the P.W.D. do a good deal of work that ought to be done by the Ryots especially considering the low assessment.

4. The Many Reservoirs might irrigate much more land for a first crop if proper channels were

P.W.D. 52 31/72.

were dug, there is no second Crop under it although it is usually full at the beginning of November the most unmistakeable result of the low assessment in this District is the nocturnal idleness exacted both of the people.

I have the honor to be
Sir
Your most obd.t Servt
Signed J Buckley Capt RE
Executive Engr overseeing Ganjam

P.S. Mr. Harris Executive Engineer believes there are 12,736 acres under the Gyamungalum Channel instead of 9552 acres as entered in Revenue Accounts and fears as under the Vunnadhara Channels Zemindars and Inamdars Contribute Nothing towards keeping the work in repair.

(Signed) J. Buckley Capt RE

(True Copy)

Captain RE
Executive Engr overseeing
Ganjam

Rec.d 15th Nov.r 72 Ld B.N.2335

Memorandum

In Revd Order No. 353 of 29th Febry 1872 the Govt. instructed Govt. Engineer to receive the proposals for the Korakoi and Rookhkolia projects and encouraged local Officers to bring forward all promising plans for drainage works in the Ganjam District. And the early revision of the land assessment urged in paras 34 to 36 and 41 of Mr Thornhill's Report was ordered to be commenced by the Revenue Board.

In Revenue Boards Proceedings No. 505 of 27th March the Collector who requested to state when he would be able to submit his Report on the Financial aspect of the Rookhkolya Project and the Director of Revenue Settlement's view on the new settlement could be introduced into Ganjam. An alternative project for irrigating the Berhampore Taluk from the Godilipalli River is mentioned as recommended by Mr Gordon Forbes for discussion before adoption of the longer scheme.

No reply has yet been communicated to Govt. on the subject of the Revenue returns. But in the order in the Revd Dept. No. 797 of 14th May Govt. appreciate the re-

: vision of the Assessment of the
Gunjam District being de-
: fered until Mr. Goodrich's
return from sick leave, ex-
: pected at the commencement
of next Official Year -

Of the Rookery or Mullundurum:
: pam Project Major Beckley
has reported in the 6th para.
of his letter No: 127 of 9th Augt.
and in his letter No: 138 of 16th Augt.
he states his intention of ad:
: vancing the Project after de:
: patch of the Rookkerolin papers.

In S.W. Order No: 111 of 14th May the
Chief Engineer for Irrign: and the
Supdtg: 1st Div: were called on
to report their opinion of the
Godaballi River Project; which
call was transferred from the
latter Officer to Major Beckley
in G.O. No: 1557 of 27th June - His
statement on the subject is con:
: tained in para 16 of his Report
of 10th Sept: on the Rookkerolin
Project - Major Oakes's is not
yet received, but is understood
to be condemnatory of the pro:
: ject (as Major Beckley's is)
on the score of inadequacy of
supply, there being 10 to 12000
acres of existing cultivation al:
: ready dependent upon this
River -

General reports on a number
of Minor Irrigation Works in Gun:
: jam are contained in Major
Beckley's No: 127 of 9th August.
But the works in Vizagapatam
have not been specially at:
: tended to as yet - In let:
: ter printed with G.O. No: 1557
of 27th June, Lt Gl. Dickens says
that it is no use recommending
Irrigation Projects there, for
there is absolutely no means of as:
: certaining if there will be any
returns; and Revenue Officers
consider it hopeless to make
Zemindars pay for water.
See Mr. Lavis letter to the Revt
Board No: 500 of 12th May 1871 -
The burden of Major Beckley's
remarks on every Project
is also the hopelessness of
ending up a satisfactory re:
: port unless ~~the~~ an adequate
assessment is put upon the
lands affected -

The conclusion arrived at
is, therefore, that ~~this~~ the
arrival of Mr. Goodrich's settle:
: ment is to be awaited, the
Rookkerolin Project for which
Rs 1,25,000 have been entered in
the Budget of 1873-74, must
be deferred till 1874-75 or
1875-76; unless the services
of an experienced Head Asst.
or Sub Collector can imme:
: diately be made available

to report specially on the compensation to be given for lands taken up or submerged, and the assessment to be put upon lands benefitted by the works now submitted for —

GWW
16.10.72

Engr in Chief

Print accompanying Papers in the following order. —

Note from Chief Engr for Irrigation No 222 dd 16 Octr /72. —
From Ex Engr to Chief Engineer No 77 dd 28 June /72 —
From — do — to — do — No 127 dd 9 August /72
From — do — to — do — No 204 dd 25 Sept /72 —
From — do — to — do — No 123 dd 6 August /72 with Sketch marked C to L
From — do — to — do — No 70 — dd 8 June /71 —
Extract from Genl Report —

Rev. & the Irrigation Dept.

Read the following

From the Chief Engr.
for Irrigation (R. L. No. 225 d/10. Oct/72)

The services of Major
Beckley R. E. were al-
-lotted for examination
of the Irrigation Projects
in the Ganjam and
Vizagapatam Districts
by G. O. No. 1351 of 1st May
1868; and he landed
at Gopalpore on
the 2d June. The prin-
-cipal duties on which
he was to be employed
were defined as the

"examination of sites
"for Reservoirs in the
"upper parts of the basin
"of the Rooshikooliya above
"the junction of the Lokar-
"Raudy and Inahanuddy
"in Ganjam; and in
"the upper valleys of the
"rivers in Vizagapatam".

From the above date
to the end of July 1872
a period of 50 months
Major Beckley has
been employed for
about four fifths of
the time on Irrigation
Projects; and for one
fifth on general duties

of the Division which
appear to have been
unauthorizedly put
upon him by the Supt Engineer
or assumed by him-
self. And the whole
cost of his work during
that period amounted
to Rs 76.794 as detailed
below; to which will
have to be added Rs
6292 for costs up to
30th November making
a total of Rupees
83.000 in round
numbers.

Abstract

Abstract

	Captain Beckwith's salary Travelling allowance &c.	Office Establishment including Travelling allowance	Khasper Subordinates including Travelling allowance	Survey Establishment including Contingencies	Other expenses	Total
From June 1868 to March 1869:	11.781	890	840	1871	985	16.367
1869 — 1870	13.224	1215	"	2546	681	17.666
1870 — 1871	14.025	1314	"	3.091	529	18.979
1871 — 1872	13.728	1.214	"	2.478	332	17.752
From April to July 1872	4.400	465	"	958	210	6.033
						76.797

A preliminary Report was submitted by him on the 8th November 1868, which is recorded with G.O. No. 247 of 27th January 1869. In August 1869 he submitted a Report with Plans and Estimates for Canals only only, on which the Chief Engineer for Irrigation wrote a Memo: printed with G.O. No. 441 of 8th February 1870. Estimates for 6 Reservoirs were submitted in compliance with the above Memo: and order, with Report of the 21st May 1870, recorded with Memo: of the Chief Engineer for Irrigation in G.O. No. 2553 of 27th October 1870. The project so far as then worked out was for

Canals costing - 15 Lakhs
Soorada Reservoir 2½ "
Additional Storage 7½ "
Total - 25 Lakhs

on which the estimated
net returns were
rectified at 13 per
cent. In this scheme
was included an in-
take across both the
Mahaumiddy and
Rooshi Koolia Rivers.

But in January 1871
Lieut. Col. Mallins vi-
sited the locality,
and in Memo. recorded
with H. O. Dec. 1789 of
16th March recommended
the construction of
one large Reservoir
storing 240 Millions
of Cubic yards on
the Rooshi Koolia, 2
miles above the anicut
site

site, from which an
Irrigating Canal should
be taken off direct-
ly. Major Ryves is stated
to have favoured the
original project,
and Major Oakes now
reports that after
personal inspection
in January 1872
and consideration
of all the papers
he came to much the
same conclusion
viz. that a Dam
should be thrown
across both Rivers
and Reservoirs made
the valleys of these

tributaries.

Estimates are now stated to have been sent up, which when revised will amount to between 22 and 25 Lakhs of Rupees; and the probable returns are stated by Major Beckley at 4 Lakhs or 16 per cent on the latter sum. But these estimates are altogether ~~utterly~~ deficient as to accurate information of the amounts to be paid for compensation of land taken up, and increase of revenue that may be derived.

Major Beckley appears further to have submitted in May 1871 an estimate of Rs 3,05,400 for an Anikut across the Yumoha dara River in the South of Ganjam, which was detained by the Supt Engineer, 1st Division, till the former officer was placed directly under the orders of the Chief Engineer for Irrigation whose office it finally reached on 1st September 1872. He has also

reported on the following
works viz

The Jayamungalum Channel from
the Godaliyadda River.
The Chalka Lake Canal.
The Sanjome and Kopaulpore Canal.
The Korattoly Soompera.
The Varada Channel.
The Boary Reservoir.
The Koratory or Mullada Soompara.

Altogether the inquiry set on foot by G.O. No 254 of 25 April has resulted in showing that the first two years of Major Beckley's time were made diligent use of, and that the prolongation of his labours up to the present date

Encl. to G.O. No 16 of 1861
Copy

without final result as to the Rosehkoolia Project is due, as stated in his letter dtd. 17 of 28th June, to his having had to consult with a Supt. Engineer and three different Irrigation Chief Engineers whose diversity of views have retarded the elaboration of any one plan. It is, in the opinion of His Excellency the Governor in Council to be regretted that no visit was paid to the locality by

by Lieut. Col. Mullins
till 2½ years after
the project was started,
although in the in-
terval he had written
2 elaborate Memos:
on the subject for
the information of
Lord and guidance
of Major Beckley. To
obviate delay in
future, special Exe-
cutive Engineers
employed on Irri-
gation Projects shall
invariably correspond
direct with the
Chief Engineer for Irri-
gation who shall
be

be responsible for
their working on a
definite plan sanc-
tioned by himself
after preliminary per-
sonal visit if pos-
sible; if not, after
preliminary report,
which should either
be succeeded by
such personal visit
or accompanied by
the special officer
himself for personal
conference.

But even when the
Engineer's duties in
connection with the
Projects in Gujam

and Vizagapatam are completed, it would appear that an indefinite period must elapse before this papers can be submitted to the Govt of India, owing to the apparent impossibility of procuring reliable Revenue Returns.

In para 4 of their order No. 2553 of 27th October 1870, the Govt desired that the revenue information required in support of the Roshikonda Project should be prepared

and report made on the rates of assessment as early as practicable, but nothing appears yet to have been done.

The Revenue Survey of Ganjam is understood to be nearly if not quite complete but the work of Revenue Settlement not to have commenced.

(And just as the preparation of an Irrigation Project requires the services of a Special Engineer so may it be necessary to devote to it

Issued omit
Retd omit

for a time the special services of a Revenue officer.) A selection of the papers now under review will therefore be printed and furnished to the Revenue Department for consideration of the best means of speedily supplying the information lacking to enable the Roorkee Project to be submitted to the Govt. of India at an early date. Major Beckley must be permitted to avail himself of the Furlough

which his state of health requires; but by the date of his departure an Engineer will have been appointed to the charge of the District, whose ordinary duties are not likely to be so heavy as to prevent his co-operating effectively with any Special Revenue Officer who may be appointed to work out Revenue details, and giving him every information

requisite as to areas affected not only by the Roorkee Project, but the other Minor works generally reported on in Major Becher's letter dtd. 12th of 9th August.

The sum of Rs 6,292 required to provide for Major Becher and his Establishment up to the 30th November is sanctioned. From that date his 2 Surveyors will be taken on the permanent Overseer Establishment retained in Ganjam or Vizagapatam. By such transfers of other Overseers as the Superintending Engineer can arrange. He will also endeavour, if possible, to provide for the 2 Draftsmen in arranging the office required under the Reorganization.

G.S.W.

300/72

Dept. 16/11/72

2 Ch. Engrs for Orissa
2 S.E. Mt. Div
All other Ch. Engrs.
30 Rev Dept
13

C/No 5231

Govt. of {1872} Madras.

PUBLIC WORKS.

To The Chief Engr for Irrigation

Dated

Recd. Encl. 14

G. O. 15 Nov 1872. No. 2686.

Nos. 2351-2356

Vellaiyatoor Project.- Re-
-ting the examination of
Major Beckley of Irriga-
-tion Projects in the Sangam
& Nyanapalam Districts,
& steps taken for the
early submission of the
Vellaiyatoor Project
and the placing of Special Ex:
-s employed on Irrigation
-s in direct communication
with Chief Engr for Irrign &c.

P.W.D.

2686
15-11-1872.