

Public Works (1897) Department.

G.O., No. 735 J

DATED 9th August 97.

[Despatch Abstract.]

Relief Works. Pros. Revenue Department
communicating to the Collector of Coimbatore
note by the Chief Engineer for Irrigation regarding
the prospects of the Bhavani reservoir project
and the Halingaroyen channel extension
being taken up as ~~petty works~~, comtd. to
the Asstg Engineer, iv Crle for information.

100-97

Indexed.

108

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
	763		9-7-97				

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

Public Works (1897) Department.

CURRENT No. 7149

Rev Dept GO no 486 of no June/97
 note by E.I. no 1399 of 1 July/97
 Endorsement no 7632 of 9th July/97
 Rev Dept GO no 3658 mis of 16 July 97
 From

By No 735 Is 9 Aug 97

Order

The Revenue Department.

Communicated to the
 Supl. Engr in Circle for
 information

No. 3658 Mis.

Dated 16th July 1897.

Received } 21-7-97
 Registered }

Enclosures

Spare copies

SUBJECT.

Communicating to the Collector of
 Coimbatore note by the Chief Engineer
 for irrigation re: the prospects of the
 Bhavani reservoir project and the Kali-
 garoyan channel extension being taken
 up as relief works.

To the Chief Engineer
 30/7/97. Supl. Engr in Circle.

24/7/97

10/8/97
 21/7/97
 24/7/97

No.	Date.
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HC.

Desayonand

~~Book~~ The orig^l was
sent to me ^{by mistake} for diagonal &
I gave it to you Spent.
away in the record.
R.

Ru
25/7/82

He

R.K.

Herewith

yes

6a

26.7.97

Ru

2672/87

ms.

Aug 18 763
5 Cornhill

22/1/77

CAW

Submitted with reference to
your note on the L. B. 1897

Pharwan reservoir
project and the Dalmij-
rayan Channal Selsin
note by E. I. re. the
prospects of the —
being taken up for
famine relief work
transf. to the
Dept.

See did not think
our clerk send
copy of L.D. with
see
4/7/87

call for the
of about 11:30
split up with
#2/10
Ind 24/7/87

This note was recd from
Daley office. What did you
do with it. No record with
the case form.

The draft was returned
into the Rev. Soc. and it was
numbered and trans. to
W. office. *MS. 9. R. H. Please back to the
Rev. Soc. have a
copy of the Note
in MS. 9.*
May I call for the
original from W. office?
MS. 9. 17/1/97

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read _____

Read Proceedings of the Public Works Department, Irriga-

atobacium . gation Branch, dated 9th July 1897, No. 763 D. on Note from the

Chief Engineer for Irrigation dated 1st July 1897.

S: S: O : S: S

Order thereon No. 3658 Mis. dated 16th July 1897.

The above note will be communicated to the Collector of
Coimbatore.

(True extract)

Comharlin

For Ag. Secy to Government.

To the Collector of Coimbatore.

" Famine Commissioner.

" P.W.D. *Irrigation Br*

Public Works (1897) Department.

CURRENT No. 6793

J P.W.C. No: 6794

with

Order

From The Chief Engineer
Jalandhar

No. 139. J.

Dated 1-7-97

Received 13.7.97

Enclosures

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SUBJECT.

Bhavani Reservoir works
the extension of Kalingaroga
Chl - Note giving the opinion of
the Jalandhar Chief Engineer
expedient of starting the
as a relief works.

He
Can this be attached
to P.W.C. No. 6793/97 please
to 15/7/97

He
was despatched
by
S. J. Verma
may be sent to
for his mission
with file
15/7/97

15/7/97

of S. 283.

BACK PAPERS.

FURTHER PAPERS.

No.	Date.
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No.	Date.
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Copy E.I. on Bhavani
reservoir project & Kalunge-
vayal channel Extension

7632
9.7.97

PUBLIC WORKS DEPARTMENT,
IRRIGATION BRANCH.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

*Chief Engineer's opinion on the expediency of starting
Bhavani reservoir with Extension of Kalungevayal
channel as relief works*

UNDER date the

READ the following

Proceedings of Govt. Rev. Dept. (H.R. No 486. Rev. of 24. 6. 97)

Note by the Chief Engineer for Irrigation (H.R. No 41-7-97)

No 763 D of 9.7.97

Transferred to the
Revenue Department
with reference to para 2
of its order No 486. Rev.
dated 24 June 1897.

Yes.
A.H.
6.7.97

I am sorry to read the report of the failure of the
investigation of the promising site for the
Bhavani Dam. The P.W.D. should, as soon
as the pressure of the famine relief is lessened
or removed, - press forward earnestly the
examination of the engineering details of the
scheme.

Speaking generally, - it is one of the most
important duties of Govt., to increase the irri-
gated area of the country, - as a means of
decreasing the risks of scarcity and famine.
The C.E. is emphatically desired to keep
this in mind.

A.H. 6.7.97

[Signature]
2/7/97

W.H.
2.7.97
1

[Signature]
9/7/97

Issue
W.H.
9/7

Note
E.I. fair note with transfr
Enclosure signed by I (deputy)
to the Rev. Dept on 9-7-97-
with No 763.2
9.7.97

7
Tolue numbers

No. 139. J. 41. 7. 97

G.O. No 486 Rd. No. 697

Note by the Chief of Irrigation

With reference to para 2 of the Government order quoted above in which ~~opinion~~ the undersigned opinion is asked as to the expediency of starting the Kharwar Reservoir link and the extension of the Kharwar Channel as relief works in the event of relief being necessary, the following information regarding these two works is submitted -

2. The extension of the Kharwar Channel was designed to increase the irrigation under the channel by 15000 acres, the present area being something over 12000 acres. The estimate was sanctioned but work not put in hand, at first for want of funds, but afterwards because a doubt arose whether the necessary water could be carried beyond the end of the existing channel. The length of the channel in a straight line is something over 30 miles, but it follows a sinuous

a course that the actual length is 59 miles and there are hundreds of sluices over the reputation of which there is very imperfect control and the ryots have always been in the habit of running much larger quantities of water over their lands than can be used, in order to obtain a larger quantity of the silt on which the land to a great extent depends for its fertility - There is often a difficulty now in getting down to the end of the channel and apparently no probability of its ever being possible to largely extend the cultivation unless the channel is re-sluiced throughout and only water required for irrigation allowed into the distributaries. The cost of doing this is under enquiry - Should it prove impracticable to carry out the re-sludging of the channel must be abandoned. It would be unwise to calculate on its being available for famine relief -

3. The site which appeared to be the most promising for the Wharain Dam has been fully investigated but the result has not been satisfactory as the unfenced rock is found to be at a considerable depth - a new site is now being

tried and there is good hope that it will prove more economical than the other - The wisely plan, to be as complete as it should be, will take some time and must delay the preparation of estimates and be delayed - The delay in selection of the site need not delay the 15000 acres intended to be building stone at the quarry - With regard to the question whether the reservoir there would apparently irrigate for the Kalyangpur Chattram can instead be irrigated from the reservoir there would apparently be sufficient water to store what is required for the land north of course necessitate making the reservoir larger than would otherwise be necessary - As far as a directy claim has gone there is found to be no line along which a channel can be cheaply made - Orders have been given to continue the investigation but it is at present hindered by the withdrawal of Mr. Coltham to the famine district. It is much to be feared that it will be found not to pay to attempt irrigation direct from the reservoir.

1/7/97 W.H. Chief Engr. for Dist. 2/2/97

Recd. 13.7 }
Regd. 13.7 } 1897.

Enclosures

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G.O., No. 486, 24th June 1897.

JUNE.

Recording with remarks, the joint report of the Chief Engineer and Secretary to Government, Public Works Department, and the Third Member of the Board of Revenue on Famine Relief Estimates, Famine Tools, &c., in the Coimbatore District.

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following letter from the Hon'ble Colonel D. M. CAMPBELL, R.E., Chief Engineer and Secretary to Government, Public Works Department, and H. M. WINTERBOTHAM, Esq., Third Member, Board of Revenue, to the Secretary to Government, Revenue Department, Madras, dated Camp Salem, 5th June 1897, No. B.

With reference to G. O. Revenue, No. 382, dated May 25th, 1897, and in continuation of our letter A, dated June 4th, 1897, we have the honor to submit the following report regarding the Coimbatore District:—

1. *General condition of the District.*—The Collector, Mr. Bradley, from whom our information has, of necessity, been chiefly derived, has been in the District three years, and has the advantage of knowing it well. At present there are no signs of distress anywhere. On the contrary prospects are decidedly encouraging. Last year's harvests were good. Early showers have been general and above the average almost everywhere.

Rainfall.—The following statement shows the rainfall from April 1st up to May 31st, as compared with the average:—

Stations.	Rainfall from April 1st to May 31st.	Average.	REMARKS.
	Inches.	Inches.	Inches.
Kollegal ...	5.79	5.92	— 0.13
Gopichettipalayam ...	8.39	3.53	Not available.
Satyamangalam ...	6.49	3.56	+ 2.96
Bhavani ...	8.00	3.56	+ 4.44
Erode ...	7.83	3.84	+ 3.99
Perundurai ...	5.95	3.83	+ 2.12
Karur ...	4.84	3.70	+ 1.14
Aravakurichi ...	5.39	3.58	+ 1.81
Dharapuram ...	5.96	2.76	+ 3.20
Kangayam ...	4.33	4.57	— 0.24
Palladam... ..	4.77	2.96	+ 1.81
Avanashi... ..	6.10	4.46	+ 1.64
Coimbatore ...	3.07	2.60	+ 0.47
Mettupalayam ...	4.94	3.81	+ 1.13
Pollachi ...	4.29	3.59	+ 0.70
Udamalpet ...	6.59	2.70	+ 3.89

The wells are full almost everywhere, and there are unusually large and good garden crops on the ground throughout the district.

Good stocks of straw are visible, and pasturage, though scanty, is above the average at this season. It is probable that more cotton will be picked in almost all taluks as the result of recent favorable showers.

2. *Prices.*—Prices for the week ending May 29th were as follows:—

Names of Grains.	Prices in seers of 80 tolas per rupee.				
	This week.	Last week.	Normal for the Month.	Scarcity rates.	Warning rates.
Rice ...	10.43	10.66	13.10	7.80	10.40
Ragi ...	19.97	19.87	27.80	14.00	21.00
Cholam ...	16.20	16.10	22.50	12.00	18.00
Cumbu ...	18.61	18.61	25.30	13.00	19.50

It will be seen that the price of all grains is well below scarcity rates. Rice is just at the warning rate. Ragi and Cumbu exceed the warning rate by only one seer per rupee, and cholam by less than two seers.

3. *Exports of grain.*—There is, as might be expected, a brisk export of grain by rail. Since the middle of February, 5.22 lakhs of maunds have been exported as against 1.62 lakhs imported.

4. There seems, however, no present reason to apprehend that famine elsewhere will drive up prices in Coimbatore to scarcity rates. Even if the South-West Monsoon should entirely fail, we believe, on the best information we have been able to get, that there is no probability of any famine-relief works being required in Coimbatore unless, and until, the North-East Monsoon likewise declares itself unpropitious, say in November next.

5. *Programme of Famine-Relief Works.*—Turning now to the Programme of famine relief works, we find that it includes works roughly estimated to cost 41.32 lakhs, intended to furnish employment for three months for nearly 27 per cent. of the population of the district (2,000,000 in round numbers according to the Census of 1891).

6. *Sanctioned Estimates.*—The Collector has placed before us estimates prepared by the Local Fund Engineer and sanctioned by the District Board, to the amount of Rs. 5,74,885 for the repair of roads. These estimates are already prepared, with a view to famine, on a more liberal scale than the circumstances of the Local Boards would warrant, but, should famine supervene, there is room for collecting and stacking metal and gravel in much larger quantities than the estimates provide for. Estimates to the amount of Rs. 74,204 prepared by the Local Fund Engineer and approved by the Collector, are also ready for the repair of certain existing roads, which are not maintained by the Local Boards, and on which no expenditure would be incurred in ordinary years.

7. The above were the only estimates produced before us, but the Collector informs us that there are, in the hands of the Tahsildars, estimates to the aggregate amount of about eight lakhs, prepared in previous years for the purposes of the Famine Programme, but which have not received formal sanction. The notice given to the Collector of our visit was too short to enable him to obtain these estimates from the Tahsildars, and we could not wait for their arrival. These estimates are all, or nearly all, of the class referred to in paragraph 9(3) of the Famine Code, viz., for simple works usually carried out by the Revenue Department, and only requiring rough estimates. They would include, chiefly, the clearance of prickly pear from village sites, and from the banks of tanks and channels: the improvement of village sites and village water-supply: the improvement of village roads, not ordinarily maintained by the Local Boards.

We are not clear, and have not the means at hand of satisfying ourselves as to what is the proper authority for sanctioning estimates of this class, which are individually petty, but may aggregate in the total a vast sum.

In ordinary years, the Taluk Boards would be the proper authority for dealing with estimates relating to the improvement of village sites. Where, however, the estimates are prepared for the purpose of affording employment to relief workers, and the cost is to be debited to Famine, we apprehend that the sanction of the Collector should be sufficient.

It is obvious that the Board of Revenue cannot undertake to scrutinize such estimates in detail, and we suppose that if and when the time comes to start the works, it will suffice if the Collector submits a list of the works through the Board to Government with his application for an allotment of funds.

8. It must be admitted that the number and amount of sanctioned estimates available for immediate use is very inadequate supposing any large measures of relief to be called for. The clearance of prickly pear from village sites, and the banks of channels and tanks, offers a wide field for the employment of famine coolies in this District, and as the form of estimate for such work is of necessity extremely simple, a large number of estimates can be prepared with rapidity. The number of minor irrigation works, and the field for employment of famine labour upon them, is remarkably small.

In case of necessity probably the best form of relief work, at the opening of relief operations, will be the preparation of more road metal on the sides of the roads, as a supply for future years. This also is a class of work for which estimates can be quickly prepared, from the standing information in the possession of the Local Fund Engineer as to the situation of the quarries on each road, and his knowledge of the general condition of each line of communication. Fortunately, the Local Fund Engineer is well qualified by a long and intimate acquaintance with the District for the preparation of estimates of this nature.

We do not, therefore, apprehend that any difficulty from want of sanctioned estimates is imminent.

9. In the Famine Programme a sum of Rs. 2,78,030 is entered for Irrigation Works under the D. P. W.; none of the estimates for these works have been sanctioned and few of them have even been prepared. The Superintending Engineer has given satisfactory reasons why none of these works (except possibly the restoration of the Sanjeeviroyen tank) are suitable for famine-relief, so that they need not be considered as a means of affording employment for the distressed. The Superintending Engineer explained that the estimates were not got ready as the works were considered unsuitable for famine-relief; and because under section 5 of the Famine Code only such works as would be executed in ordinary times should be estimated for; and as the works entered in the Programme and included in the sum of Rs. 2,78,030 are not such as would be undertaken in ordinary years, it is evident that they should not have found a place in the Programme.

The Sanjeeviroyen Project, the approximate estimate for which is Rs. 20,000, will take three months to investigate, and may then be found to be an undesirable work to undertake.

10. We have kept in view the advisability of massing relief workers on a few large works as proposed in G. O. Revenue, No. 314, dated 11th May 1897, and with this object, the Programme was carefully examined. The only two large works which would be suitable for famine-relief are the Bhavani Reservoir Project,

approximate estimate Rs. 44,00,000, and the extension of the Calingaroyen channel, estimate Rs. 6,40,000. The former of these works has not yet been sanctioned, but the site for the dam is now being examined and could be decided on in a few weeks. There is little doubt, but that this Project will be sanctioned eventually, though it may be some years before funds are available; but if Government approve, stone could be broken up for the dam, and the excavation of the leading channel put in hand. These works would give suitable employment for a large number of persons. As regards the Calingaroyen Channel Extension Project, this was sanctioned five years ago, but was not begun for want of funds, and, under the rules, renewed sanction had to be applied for: but the Government of India refused to renew the sanction until it had been finally decided whether an area equal to that it was proposed to irrigate could not be more economically irrigated direct from the proposed Bhavani Reservoir. A further question occurs to us, viz., whether, with due regard to the wants of the irrigated area in Trichinopoly and Tanjore, water is available for the additional 15,000 acres which would be brought under irrigation. Otherwise this work would make a most excellent relief work, and we recommend that the Chief Engineer for Irrigation be requested to give his opinion as to the desirability of starting it, and also the Bhavani Reservoir Project, in the event of its becoming necessary to find employment for relief workers in large numbers.

11. We have already stated our belief that this necessity will only arise in the event of a failure of the ensuing North-East Monsoon: but to avoid all risk of difficulties owing to want of sanctioned estimates, we suggest that the Superintending Engineer be at once ordered to take steps to prepare estimates for clearing prickly pear in channels, and for raising and strengthening tank banks. He has informed us that if an establishment of 8 surveyors and 24 lascars is placed at his disposal for a period of two months, he will be able to prepare a large number of estimates in that time. This establishment is necessary, owing to so many of the subordinates in the District having been withdrawn for famine work in the 1st and 3rd Circles. We therefore think it advisable that sanction should at once be given for the employment of

8 Surveyors at Rs. 70 =	560
24 Lascars at „ 6 =	144
Total 704	

for a period of two months.

This proposal is no doubt open to the objection that it contemplates the employment of labour on a large number of scattered works, which will involve an immense amount of supervision; but in the absence of large works (unless Bhavani and Calingaroyen Projects are put in hand) there seems to be no alternative.

12. In the Famine Code Section 10(a) it is laid down that railway projects should not, except for grave reason, be included in a programme of relief works, but we think it a matter for consideration whether it would not be well to consult the railway authorities as to the possibility of starting the preparation of ballast for the railway from Palghat to Dindigul, the survey of which has been completed. This work, in case of need, would employ relief workers in great numbers.

13. Tools.—The following is a statement of the famine tools in stock:—

Divisions.	Axes, felling.	Bill hooks.	Crow bars.	Hammers, stone breaking.	Mamooties.	Pick axes.	Rammers.	REMARKS.
Coimbatore ...	95	...	852	6,835	5,695	4,085	859	

The tools in the Coimbatore stores were counted by the Superintending Engineer on the 3rd instant, and examined by us on the same day. The number of each description is slightly in excess of that ordered to be kept in stock in Government Order No. 3116-W, dated September 2nd, 1893, with the exception of stone breaking hammers, of which there is a deficiency owing to some having been lately transferred to famine works in other circles. All the tools are serviceable, but we would point out that the number of each description as laid down in the Government Order referred to above is altogether inadequate to meet the demand in the event of a famine.

The population of the District was, in round numbers, two millions in 1891. Taking 20 per cent. as the maximum number for whom relief works may be necessary, (Famine Code, Section 8) and allowing one tool for every three persons, a stock of 134,000 tools is required for Coimbatore alone.

Stone hammers	... 40,000
Mamooties	... 9,000
Pick axes	... 5,000
Rammers	... 1,000
Crow bars	... 9,000
Sledge hammers	... 500
Hand axes	... 500
Bill hooks	... 500
Instruments for clearing prickly pear	... 4,500
TOTAL	... 70,000

We consider that the District stock should certainly be brought up to the figures shown in the margin, which total up to rather more than half the above figure. We consider that the provision of more tools is urgent.

The Establishment in the Public Works Workshops is engaged day and night in turning out hammers. We have asked the Superintendent to report the maximum number which he can thus manufacture daily.

If it appears that he will not be able to meet requirements in the event of distress extending to other districts in July, we will ascertain what supply of tools is locally obtainable from local Firms at Madras and elsewhere, and Government will then be in a position to judge as to the necessity of transmitting an urgent indent to the Secretary of State.

14. *Provision of handles.*—The tools in store are not provided with handles, and we do not see our way to recommending that a stock of wooden handles should be maintained. They would be subject to attacks of white-ants and wood-borers of sorts, and would soon become useless. We think, however, that the Collector should at once ascertain from his Forest Officer, or local contractors, how far he is in a position, on short notice, to obtain a sufficient number of roughly shaped handles for hammers, mamooties and pick-axes. He should also ascertain whence, and within what time, a sufficient supply of baskets for carrying gravel and metal, can be got.

15. We regard it as at present premature to make any definite proposals as to the large increase of establishments which would be requisite in the event of distress becoming more wide-spread.

ORDER—No. 486, DATED 24TH JUNE 1897.

The Government concurs in the opinion expressed in para. 7 of the letter read above that estimates for petty works which are usually carried out from Local Funds, but which are to be undertaken as part of the famine programme may be sanctioned by Collectors and that it will suffice if these officers submit a list of such works through the Board of Revenue to Government with their application for allotment of funds.

2. The Chief Engineer for Irrigation will be requested to give his opinion as to the expediency of starting the two projects referred to in para. 10 as relief works in the event of its becoming necessary to afford employment to large numbers. The Consulting Engineer for Railways will be requested to ascertain whether the preparation of ballast for the railway from Palghat to Dindigul can be reckoned on for the relief of distress.

3. The appointment of 8 surveyors and 24 lascars for a period of two months recommended in para. 11, is sanctioned.

4. The Collector of Coimbatore is requested to submit a very early report with reference to para. 14. As regards the recommendation in para. 13, the Government awaits the report called for from the Board of Revenue in G. O. No. 2655, dated 25th May 1897.

(True Extract.)

G. H. S.

Ag. Secretary to Government.

To be registered

To the Famine Commissioner.

- " Public Works Department.
- " Public Works Department (Irrigation). ✓
- " Public Works Department (Railways). ✓
- " Collector of Coimbatore.
- " Financial Department.

with 5 spare copies

C. I. for ...
H. S.
1/2/97

W. J. ...
12/7/97