12-2-90/RH

1889 1899

-1889/80 RH

~~5895/90/RH~~

5106/90/RH

1889 1899

M.R.O. 1—5,000—16-10-50.

(1) Number of pages_____

(2) Date of repair_____

(3) Initials of the Referencer_____

MADRAS RECORD OFFICE

Government of Madras

Public Works (Irrigation) DEPARTMENT

G.O. No. 442-43 Press
~~B.P. No.~~ (9) 1899 Mis. 1899

Dated 19-5-~~1889~~ 1899 ~~1889~~ ~~195-~~

Not to be folded or roughly handled

5126/98

Public Works (1899) Department.

G.O., No. 4422
4433

DATED 19 Mar 1899

[Despatch Abstract.]

arikanave Reservoir, Deccan: that a letter
sent to the Resident in Mysore stating that the
claim to supply of water from the — has been waived
& objection to the Construction of dam has been
withdrawn by this Govt on the assumption that
the Reservoir will not injure British irrigation.

arikanave Reservoir, stating that the Claim
supply of water from the — has been waived
& objection to the Construction of dam has been
withdrawn by the Mysore Govt on the assumption that the
Reservoir will not injure British irrigation and that if after
experience of a year or so it is found that such
injury has been suffered, this Govt will expect compensa-

[W 28,
0—27-4-99.]

19/5/99

IRRIGATION.

Government {1899} of Madras.

PUBLIC WORKS.

Recd. } 1899. *Enclosures*

Regd. *Spare copies*

G.O., No. 442 I., 19th May 1899.

MAY.

Marikanavi Reservoir

Directing that a letter be sent to the Resident in Mysore stating that the claim to the supply of water from the — has been waived and objection to the construction of dam has been withdrawn by this Government on the assumption that the reservoir will not injure British irrigation.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.

READ—the following papers:—

From Lieut.-Colonel DONALD ROBERTSON, I.S.C., C.S.I., Resident in Mysore, to the Secretary to the Government of Madras, Public Works Department, dated Bangalore, 30th November 1898, No. 6416E/624-85.

With reference to your letter No. 749 I., dated the 28th September last, I have the honour to forward copy* of a letter No. 29-361, dated the 16th instant, from the Secretary to the Government of Mysore, Public Works Department, containing the views of the Darbar on the claim of the Government of Madras to a supply of water from the proposed Marikanavi reservoir, and to state that if, after consideration of the arguments advanced by the Darbar, the Madras Government still maintain the position as set forth in your letter under acknowledgment, the question will, as desired by the Darbar, be referred for the orders of the Government of India.

* With enclosures in original to be kindly returned.

No. III/2 B.L.

With reference to the question of asking the Mysore Government to provide compensation water from the Marikanavi reservoir, the Superintending Engineer is requested to report at what period of the year cultivation is carried on under the tanks and channels in the list received with his endorsement No. 1580 I., dated 30th July 1898, and whether there is any direct irrigation from the channels supplying tanks.

2. In some papers received from the Mysore Government it is asserted that six-sevenths of the Hagari discharge occurs in the months of September and October and that the average discharge in other months for the years 1863 to 1865 was as follows:—

	CUBIC FEET PER SECOND
January to April	*Nil.*
May	58
June	765
July	173
August	524
November and December	*Nil.*

It is argued from this, on the assumption that the irrigation in British territory is in the hot weather, or at any rate after October, that irrigation in British territory will not suffer by the construction of the reservoir, but on the contrary benefit by the surplus water or leakage estimated at 86 cubic feet per second or one-fifth of the quantity to be issued for irrigation. It is not known how far this argument is sound and the Superintending Engineer's opinion is requested.

3. The drainage area of the Marikanavi reservoir is about 2,100 square miles, of which 1,400 square miles drain into existing tanks. Below the reservoir there is a drainage area in Mysore territory of 3,220 square miles, of which 2,697 square miles drain into tanks. The drainage area in British territory is said to be 3,229 square miles. The Superintending Engineer should verify this and ascertain approximately how much of it drains to the river direct.

It is requested that this reference may be treated as urgent.

(Signed) W. HUGHES,
6th January 1899. Chief Engineer for Irrigation.

From Lieut.-Colonel W. L. C. BADDELEY, R.E., Superintending Engineer, III Circle, to the Chief Engineer for Irrigation, dated Bellary, 4th February 1899, No. 526 I.

In reference to your No. III/2 B.L., of 7th January 1899, I have the honour to forward a copy of letter No. 561, of 27th January 1899, from the Executive Engineer, Bellary Division, which answers the queries in paragraphs 1 and 2 of your memo.

I agree with the opinions expressed by Mr. Clerk.

2. As regards paragraph 3, I make the area of the drainage basin of the Hagari, within British limits, to be 3,057 square miles, of which 2,412 drain direct into the river and 645 into tanks.

From Lieut.-Colonel DONALD ROBERTSON, I.S.C., C.S.I., Resident in Mysore, to the Secretary to the Government of Madras, Public Works Department, dated Bangalore, 4th February 1899, No. 500.

I have the honour to invite a reference to my letter No. 6416, dated the 30th November 1898, regarding the proposed Marikanavi reservoir, and to request the favour of an early reply, as the Darbar report that the work is proceeding and expenditure on it is going on rapidly.

Telegram from the Resident in Mysore, to the Secretary to the Government of Madras, Public Works Department, dated 13th February 1899.

No. 30. Please refer to my letter No. 6416, dated 30th November last, and reminder of 4th instant, Marikanavi project. Darbar represent that monthly expenditure amount to half lakh rupees and to stop work pending settlement question would cause great loss. They therefore ask for early decision.

Memo. No. III/9 B.L.

The undersigned is directed to request, with reference to letter No. 526 I., dated 4th February 1899, from the Superintending Engineer, III Circle, that he will be so good as to ascertain roughly and report as soon as possible, for the information of Government, how much is annually spent by the Public Works Department, or the Revenue Department, or the villagers on the channels to the Yepraul and Kanakal tanks.

2. It is requested that this reference may be treated as very emergent.

(Signed) W. HUGHES,
28th February 1899. Chief Engineer for Irrigation.

No. III/11 B.L.

With reference to this office No. 9 B.L., dated 28th February 1899, it is thought that the cost of maintaining the channels to the Yepraul and Kanakal tanks cannot possibly be increased by the construction of the Marikanavi reservoir, and that the Superintending Engineer need not therefore make enquiries regarding the cost of maintenance.

2. The important question is whether, owing to the reduction of the free catchment of the river from 1,798 to 1,123 * square miles and total catchment area from 6,069 to about 4,094, the height of freshes will be so reduced as to greatly impair the supply to the tanks during freshes and whether, in consequence of this, it will be necessary to widen the channels. The Superintending Engineer is requested to report regarding this, stating the extent to which the channels will have to be widened and the probable cost.

	sq. mls.
* In Mysore above reservoir ...	... 675
,, below ,, ...	... 523
In Bellary above Kanakal channel, about	... 600

(Signed) W. HUGHES,
Chief Engineer for Irrigation.

8th March 1899.

Telegram from the Chief Engineer for Irrigation, to the Resident in Mysore, dated 8th March 1899.

No. 10. Your letter No. 6416 of 30th November last. Claim to supply of water from Marikanavi reservoir waived and objection to construction of dam withdrawn. Letter will shortly follow.

From Lieut.-Colonel W. L. C. BADDELEY, R.E., Superintending Engineer, III Circle, to the Chief Engineer for Irrigation, dated Bellary, 20th April 1899, No. 1564 I.

In reference to your No. III/11 B.L., of 8th March 1899, I have the honour to forward a copy of letter No. 2471, of 11th April 1899, from the Executive Engineer, Bellary.

2. There is, in my mind, no doubt that the water-supply to British irrigation will be much more seriously affected by the construction of the Marikanavi reservoir than the Mysore authorities have hitherto admitted.

3. I do not agree with Mr. Mullings that the reservoir should not be constructed. The only question is the nature and amount of compensation to the British Government and ryots.

4. It is not possible to calculate the reduction in the height of freshes due to the construction of the reservoir, but there appears to be little doubt that no supply at all will be available for the British irrigation works during the months of May, June, July, August, November and December. I have included November and December although the Mysore authorities give the average discharge during these months as "*Nil*," because it appears from Mr. Mullings' observations that the river does at times hold water during these months.

5. I recommend that the compensation should take the form of water-supply from the reservoir and not money payments.

The compensation water should be provided by means of a sluice in the reservoir to pass 380 cusecs during the months of May, June, July, August, November and December. The total average discharge of the river during the months May to August is 1,520 cusecs according to the Mysore authorities, and for reasons already given, I have included November and December as months during which compensation water should be supplied, though I have deducted them in calculating the average discharge from the reservoir required as compensation.

6. Practically the ryots holding lands under the tanks will lose one crop yearly. Mr. Clerk considers that the proposed surplus of 86 cusecs from the reservoir will compensate the ryots, who cultivate under channels. Personally I do not think any of this 86 cusecs will be actually available, as most of it will be lost in the sandy bed of the river or used up in other ways during its flow of about 100 miles down the river.

7. In conclusion I strongly recommend that if the compensation is to take the form of a supply from the reservoir, there should be no room for doubt in the rules for working the sluice, and it should be open to the Madras Government to appoint men to be in charge of the sluice to ensure that the proper supply is sent down the river.

ORDER—No. 442 I., dated 19th May 1899.

The following letter will be addressed to the Resident in Mysore in reply to his letter No. 6416 E/624-85, dated 30th November 1898, and in continuation of telegram No. 10, dated 8th March 1899.

[Here enter No. 443 I., dated 19th May 1899.]

(True Extract.)

(Signed) W. HUGHES,
Joint Secy. to Government,
Irrigation Branch.

To the Chief Engineer for Irrigation.
,, Superintending Engineer, III Circle.
,, Examiner, Public Works Accounts.
,, Revenue Department.

Exd. P. Seetharam.

IRRIGATION.

Government {1899} of Madras.

PUBLIC WORKS.

Recd. } 1899. *Enclosures*

Regd. } *Spare copies*

Letter, No. 443 I., 19th May 1899.

MAY.

Marikanavi Reservoir

Stating that the claim to the supply of water from the — has been waived and objection to the construction of dam has been withdrawn by the Madras Government on the assumption that the reservoir will not injure British irrigation and that, if, after the experience of a year or so, it is found that such injury has been suffered, this Government will expect compensation.

No. 443 I., 19TH MAY 1899.

PUBLIC WORKS DEPARTMENT.

Irrigation.

LETTER—from

W. HUGHES, ESQ.,
Joint Secretary to the Government of Madras,
Public Works Department,
Irrigation Branch,

To

THE RESIDENT IN MYSORE.

SIR,

In continuation of my telegram No. 10, of the 8th March last, and with reference to your letter No. 6416 E., of the 30th November 1898, on the subject of the Marikanavi reservoir, I am directed to inform you that this Government has made the concession on the assumption that the reservoir will not injure British irrigation, and that, if, after the experience of a year or so, it is found that British lands have suffered injury, this Government will expect compensation in proportion to any outlay which it may be found necessary to incur to remedy the injury.

I have the honour to be,
Sir,
Your most obedient servant,

Joint Secretary to Government,
Irrigation Branch.

OOTACAMUND,
19th May 1899.

Exd. P. Seetharam.

10/

KE. 7

PUBLIC WORKS DEPARTMENT,

IRRIGATION BRANCH.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the

Mavikanava Reservoir

READ the following

P.W.C.No. 1001/98 Letter from the Resident in Mysore No. 6416 E / 624-85 d. 30 Nov. 98.

with Enclosures—

Memo to the Supg. Engineer 3d Circle. No. III / 2. B.L. d/ 6-1-99

3959/98 Letter from the Supg. Engineer 3d Circle — No 526. I. d/ 4. 2. 99

1154/98 Letter from the Resident in Mysore No 500 dated 4. 2. 99

1420/98 Telegram — do — do — " 13. 2. 99

Memo to the Supg. Engineer 3d Circle. No. III / 9. B.L. " 28. 2. 99

— Do — Do — " III / 11. BL - 8. 3. 99

Telegram to the Resident in Mysore No 10. dated 8. 3. 99

2555/99 Letter from the Supg. Engineer 3d Circle - No 1564. I. d/ 20. 4. 99

Issue 9.5.99 WH

11 P

Order No: 442 Dt/ 19-5-99

The following letter was addressed to the Resident in Mysore in reply to his letter No. 6416 E / 624-85 dated 30th Nov. 98 and in continuation of telegram No. 10. dated 8th March 99.

To The Chief Engineer for Irrigation
Superintending Engineer 3d Circle
Executive Engineer
Revenue Sheristadar

WH 5.5.99

5/5/99

9/6/99

12/

A

Dep^t.

No: 443 Dated 29/5/99.

To The Resident in Mysore

—.

Sir,

In continuation of my telegram no 10 of the 8th March last and with reference to your letter No: 6416 E.C. of the 30th Nov^r 98 on the subject of the Marikanave Reservoir I am directed to inform you that the Gov^t has made the concession on the assumption that the Reservoir ~~it~~ will not injure British irrigation and that if after the experience of a year or so it is found that British lands have suffered injury the Gov^t will expect compensation by claiming payment for the construction of such works as are necessary to remedy the injury —

29/5/99. W.H.

67/5/99.

Enclos. one book with follow

Enclosure in hfs
Copy signed by J. Pantulu

12 P Hyd Z

29/5/99

I would prefer to say in proportion to any outlay which it may be found necessary to incur to remedy the injury W.H. 6-5-99

(It might be deemed expedient to compensate injured ryots in money)

R.S.H 7.5.99

5.5.99

E.V. Form No. 8—200—9-4-97.

PUBLIC WORKS DEPARTMENT,

IRRIGATION BRANCH,

READ the following:—

Note for orders dated 18th Feby 1899.

Telegram to the Resident in Mysore no 10 of 8th March 99

Memo to the Supg. Engr 3rd Circle. no III/9.B.L of 28th Feby 1899

— do — do — do — " III/11.BL " 8th March 99

From the Supg. Engr 3rd Circle - no 1564. I. d/20th April 99

FOR ORDERS.

With reference to the orders of Hon'ble Members on Note for orders dated 18th Feby 99 and on further Note dated 23 Feby 1899, the following telegram was sent to the Resident of Mysore.

" Your letter 6416 of 30th
" November last, claiming
" to supply of water from
" Marikanava Reservoir
" waived and objection
" to Construction of dam
" withdrawn."

Also two Memos were addressed to the Supg. Engineer 3rd Circle, with reference to information asked for by the Hon'ble Members.

In Memo No III/9.B.L dated 28th Feby 1899, the Supg. Engineer 3rd Circle

Flag A

Flag B

" No 10 of 8.3.99 (D)

Serial No 47 in Stock file.

I forebore to make a report how much was annually spent by the P.W.D. on the Revenue Dept on the Channels to the Veyraud and Kankat Creeks.

In Minute No 111 dated 2nd March 1899, the Supg Engr was asked to report whether the effect of the reservoir would be to reduce the freshes in the river to such an extent that it would be necessary to widen the channels.

In the Current papers, the Supg. Engineer, 3rd Circle, replies to the letter in which he recommends Compensation waters being supplied from the reservoir and the Executive Engineer in an enclosed letter thinks that widening the channels would be of no use.

The Supg. Engineer goes beyond the demand made last year - when he asks that Compensation of 380 Cubic feet per second should be required 6 months or a total of 6084 Millions Cubic feet, he was no doubt unaware that

Serial No 48 in Stock file

Supg. Engrs No 1564. I 20.4.99

Flag D

that this is 77 per cent of the whole quantity which the Mysore Govt Expects the reservoir to supply for irrigation.

The statements made by the Executive Engineer and Supg. Engineer not being capable of proof and in my opinion mostly mistaken, I cannot give Government any further information than that contained in my note dated 18th February 1899 (Flagged A.) Instructions are requested for drafting a reply to the Resident

27.4.99

I

They assume that there will be a surplus in the river which can be drawn off in August & that the full supply will not influence the supply at this time. They consider that the river will have sufficient supply later.

In my note I have followed Powell & Clarke's opinion [illegible] I believe do not differ who has personal acquaintance with the [illegible]

The Local Engineers say that Mr Hughes' proposal to widen the channels (see Note Flagged B) would do no good. Mr Hughes advises above the utility of his proposal. But I cannot find that there are sufficient data for either of these divergent opinions. I apprehend that no increase in Mysore has been made on the assumption that it would not damage us. It is not proved yet that it will damage us, and the only thing which can settle the point is actual experience

FOR ODRERS.

Perhaps the best course will be to tell the Mysore Durbar that we make the concession on the express condition that it would not injure our new irrigation, and that if, after the experience of a year or so, we find that we have suffered injury, we shall claim compensation by claiming any water for the construction of such reservoir to remedy the injury.

The Hon'ble Resident who is now the Inspector

A.H. 2.5.99

I agree with H.E.
After our telegram to the Resident
it is the only attitude we can
take
K.E.A. 4.5.99.

K.S.
6-5-99.

19

Public Works (1899) Department.

CURRENT No. ~~25 B.L~~ 3955

Urgent

From The Superintg. Engineer
N. Circle
Bellary

Order

No. 1564

Dated 20 — 4 — 99

Received ~~22 — 4 — 99~~ 17-5-99

Registered

Enclosures 1 & 3

Spare copies

SUBJECT.

Chorikanava Reservoir

Forwards copy of letter from the Executive Engineer Bellary Dn reporting the period of the year cultivation is carried on under the banks & channels of the Construction of the

Note
Papers are in the Stock file
a Mysore reservoirs account
Work Only.
22/4/99

20

Letter from C.J. Mullings Esqr. Offg Executive Engineer, Bellary division, to the Superintending Engineer, III circle, Bellary. No. 2471 dated 11th April 1899.

Proposed Main Kanavas Reservoir in Mysore.

With reference to your No. 1138 of 20th instant, I have the honor to submit the report called for in your endorsement on the Chief Engineer's No. III/1182 as noted below.

22 APR 1899
III/25 B.L

1. There is absolutely no doubt whatever that the construction of this reservoir will result in a very serious diminution in the volume of water coming down in freshes in the Vedavatty River, especially in the months of May to August inclusive. The average rainfall in the river basin below the proposed tank is 16.88 inches as against 27.23 inches in the Reservoirs basin (see table II appended). The run off of basin from the area below the tank is practically nil during the months April to July inclusive, the freshes therefore depend entirely on the run off from the catchment above the tank which is more hilly (so that the run off is much quicker) and having nearly twice the rain fall during these months freshes are there a certainty.

2. If you agree with the above conclusions it follows that no freshes will occur after the

the construction of the reservoirs, for no only will British tanks supplied by Protective Bunds but the spring channels in the rivers will also lose their usual capacity for irrigation, for the bed will only be covered with water for two months instead of 5, and the 26 cft per sec, which is stated will be a constant discharge due to subsoil and leakage, can hardly be expected to run 100 miles without any evaporations or sinking into the beds or being tapped on the way by persons intending before it reaches their respective destinations. Moreover, the Kanakal and the Jeypaul tanks will get no supply at all till late in August at earliest, and as no water will be obtainable from Perolsi no amount of widening of the channels will be of any use to crops which are required to be put in before the middle of September, when there is always a certainty of supply. The tanks will therefore lose one crop of paddy. The present mean area of the Kanakal channel is 60 sqft. at F.S.L. and Jeypaul channel when repaired will not have a greater section.

3. Later freshes in the rivers after the middle of August, would not be so much affected as the rainfall below the proposed reservoirs rapidly increases,

but loss of water during the hot weathers to such an extent would be a standing menace to other tanks and channels with similar conditions, and is a great risk in a district like Bellary reasonably subject to the abuses of famine, and if the reservoirs is going to be allowed arrangements must be made for a supply to discharge the same quantity as the average present discharge of the rivers during all months of the year except September and October.

4. In this connection I may point out that the rivers discharges given in Chief Engineer's No. III/2 BL cannot be assumed to be correct as I saw the Vedavati river running full in the middle of November last and there was a large discharge till late in December whereas the average discharge in those months is stated to be nil. (N.B. The place where this discharge was measured is also not given).

5. The arguments of the Mysore authorities conveyed in Chief Engineer's No. quoted above have already been disposed of in this office No. 561 of 27th January 99.

6. No calculations showing the correct discharge can be given owing to the fact that neither are data nor the necessary maps available in my office

Table showing rainfall in inches in different parts of the Cauvery River basin taken from the Report on the Rainfall of India dated 1891.

	In catchment area of Lakes all in Mysore.			In River catchment below reservoirs and in Mysore Territory.			In River catchment below reservoirs in British Territory.			Remarks
	Arsikere	Kadur	Chikmagalur	Sivala	Hiriyur	Chitaldrug	Kaliandrug	Rayadrug	Bellary	
	1	2	3	4	5	6	7	8	9	
	1·66	1·04	1·77	0·47	0·77	1·25	0·70	0·37	0·60	
	3·14	3·31	4·87	2·30	2·72	3·37	2·38	2·16	1·74	
	1·63	2·26	4·32	1·51	1·45	2·27	1·49	2·23	2·08	
	1·97	1·83	6·16	1·36	1·22	2·62	0·88	1·40	1·52	
	3·07	1·35	3·51	1·58	1·31	2·99	2·25	2·03	2·00	
	4·97	2·61	3·37	2·20	3·32	4·07	6·09	3·26	4·46	
	5·52	5·24	7·48	3·10	3·72	5·11	3·32	5·06	4·27	
	3·79	2·21	2·57	1·47	1·34	2·27	2·75	1·57	1·46	
	1·11	0·13	0·80	0·24	0·43	0·45	0·16	0·19	0·11	
Totals	26·86	19·98	34·85	15·23	16·48	24·40	20·17	18·85	18·22	

22 APR 1899
2/25 B/4...

Chitramagalur, Chitaldrug, and Rayadrug are all very near if not just without the catchment of the River and so do not afford such a faithful representation of the actual conditions as would be obtained if other rainfalls in the basin could have been substituted, but it is believed no more returns are available.

(True Copy)
M. Borradaile
Lieut. Col. R.E.
Superintending Engineer, III circle.
20/4/99

(2nd) C. T. Mullings
Offg Examiner C. & B.
Bellary Div.

Table showing difference in rainfall in inches above and below the proposed reservoir for each month.

Average rainfall for the month	Within Reservoir Basins (1)	In catchment of Cedar Creek below Reservoir (2)	Remarks
1	2	3	4
April	1·49	0·73	
May	3·77	2·43	
June	2·74	1·84	
July	3·32	1·50	
August	2·64	2·03	
September	3·65	4·16	
October	6·08	4·13	
November	2·86	1·81	
December	0·68	0·26	
Total	27·23	18·88	

Note.

Column (1) gives the average rainfall per months of those at the stations shown in columns 1 to 3 of table I and column (2) gives the same for stations in columns 4 to 9 in that table

2. No rainfall is given for January, February and March as there is no run off either above or below the reservoirs during those months.

(Sd) C. J. Stubbings
Offg Executive Engineer
Bellary Dn.

(True copy)

W. Barkley Lieut-Col. R.E.
Superintending Engineer III Circle

C.W.C. & I. DEPT.
FOR INFORMATION
22 APR 1909
3/25 B.2

No. 1564 Superintending Engineer's Office,
3rd Circle,
Bellary 20th April 1899.

From

Lieut-Col. W.D.C. Bradshaw R.E.

SUPERINTENDING ENGINEER,
3rd CIRCLE,
BELLARY.

To

THE Chief Engineer,
for Irrigation,
Madras.

Sir,

Enclosures.

In reference to your No. III/1 Irl. of 8th March 99, I have the honour to forward a copy of letter No. 2471 of 11th April 99 from the Executive Engineer, Bellary.

2. There is, in my mind, no doubt that the water supply to British Irrigation will be much more seriously affected by the construction of the Mairi Kanawa reservoirs, than the Mysore authorities have hitherto admitted.

3. I do not agree with Mr. Priddings that the reservoirs should not be constructed. The only question is the nature and amount of compensation to the British Government and Ryots.

4. It is not possible to calculate the reductions in the heights of floods due to the construction of the reservoirs, but there appears to be little

little doubt that no supply at all will be available for the British Irrigations works, during the months of May, June, July, August, November and December – I have included November and December although the Mysore authorities give the average discharge during these months as "nil", because it appears from Mr Mullings' observations that the river does at times hold water during these months.

5. I recommend that the compensation should take the form of water supply from the reservoir and not money payments.

The compensation water should be provided by means of a sluice in the reservoir to pass 380 Cusecs, during the months of May, June, July, August, November and December. The total average discharge of the river during the months May to August is 1520 Cusecs according to the Mysore authorities, and for reasons already given I have included November and December as months during which Compensation water should be supplied, though I have deducted them, in calculating the average discharge from the reservoir required as compensation.

6. Practically the ryots holding lands under the tanks will have one crop yearly. Mr Clark considers that the proposed surplus of 86 Cusecs from the reservoirs will compensate the ryots who cultivate under channels. Personally I do not think any of this 86 Cusecs will be actually available, as most of it will be lost in the sandy beds of the river or used up in other ways during its flow of about 100 miles down the river.

7. In conclusion I strongly recommend that if the compensation is to take the form of a supply from the reservoir, there should be no room for doubt in the rules for working the sluice, and it should be open to the Madras Government to appoint men to be in charge of the sluice, to ensure that the proper supply is sent down the rivers.

I have the honour to be,

Sir,

Your most obedient Servant

Lieut Saddler Lieut.-Col. R.E.

Superintending Engineer

III circle

19/4

Dg

I

H.E. has not approved the telegram to the Resident. The telegram should apparently be revised as follows:-

"Your telegram 30 thirteenth inst.- Objections re construction of Manikanora dam waived - Letter follows."

Probably the above may be sent without circulation, the letter being drafted on receipt of the information called for from the Sr. III despatch put up for approval by Mr. Thomas.-

10/2

873/99 III

Send following telegram. 80

No. 10 Your letter No. 16 of 30 November last

Claim to supply water from Manikanora reservoir waived - Letter will shortly follow.

JH 8/3/97

873

and objection to construction of dam withdrawn

34

III

A.H.B.L.

S. L. III

With reference to the Govt Memo
No 9 B.L. dy 28 Feb 1899
it is thought that the cost
of maintaining the channels
to the Yeppal and Kankal
Tanks cannot possibly be
increased by the construction
of the Manikanore reservoir.
and that the Sup^t Engr need
not therefore make enquiries
regarding the cost of maintenance

In Mysore - above reservoir	675	sq m
" below "	523	
In Bellary above Kankanhalli Tank abt	600	

2. The important question is whether owing to the reduction of the free catchment of the river from 1798 to 1123 Square miles and total Catchment area from 6089 to abt 6094 the height of freshes will be reduced as to partly impair the supply to the tanks during freshes and whether in consequence of this it will be necessary to widen the channels - The S.E. is requested

3b/

Sent reply this stating the plan to which the channel will have to be widened and the probable cost

JM
8/3/99

Cost Portfolio 28/2/99

To DG for perusal & his remarks on the file for orders. The file returned from H.E. at 6 P.M. yesterday. This memo to H.E. is submitted for approval. Please initial the pencil remark before the file goes on to the Hon'ble Mr. Winter Bottom.

RCW
28/2/99

DG

20

III

No 9 BL dt 28/2/99

Memo

The undersigned is directed to request with reference to letter, No 5269, dt 4 Feb 1899, from the Supdg Engr, III Circle, that he will be so good as to ascertain promptly & report as soon as possible for the information of Govt how much is annually spent by the D.P.W. or the Rly Dept or the villagers on the channels to the Jaipur and Khandwa tanks.

2 It is requested that this reference may be treated

35/

as very emergent.

[illegible]

28/2/99

P & C 1157/98

25/

39

CURRENT NO. 248 1899

Code Class: D S — INDIAN TELEGRAPHS. — Monthly Number: 8094

To (Office): Madras — From (Office): Mercara

Words: 24 | Date: 13/2 | Rec'd: 17 | Sent: 24 | Official Instructions: defd

To (Person): Madras 58 — From (Person): Resident Coorg

GOVERNMENT OF MADRAS SECRETARIAT RECEIVED 14 FEB 1899 CHIEF

No 30 please refer to my letter no 6416 dated 30th November last and reminder of 4th instant marakanna project durbar represent that monthly expenditure will amount to half lakh rupees and to stop work pending settlement question would cause great loss they therefore ask for early decision

64 Word Form

Recd. from [illegible] I.N. At [illegible] Hrs. [illegible] Mts. by [illegible]

Sent to [illegible] I.N. At [illegible] Hrs. [illegible] Mts. by [illegible]

MADRAS 13-2-99

Telegraph Master.

C. & P.—No. 620 T. 20-4-98 1000000.

To the Supdg Engr, III Circle

CB

28/2/99

40

No. 500 4

From

Lieut.-Colonel DONALD ROBERTSON, I. S. C., C. & S.
RESIDENT IN MYSORE.

To

48 The Secretary to the Government of Madras
Public Works Department.

Dated Bangalore, 4th Febry 1899.

Sir,

I have the honor to invite a reference to my letter No. 6416 dated the 30th November 1898 regarding the proposed Markkanve Reservoir, and to request the favour of an early reply, as the Durbar report that the work is proceeding and expenditure on it is going on rapidly.

I have the honor to be
Sir,
Your most Obedient Servant
Donald Robertson
Resident.

+ No. 1001/28 Sent to Office on 3-12-98

+ Serial No. 45 of Stock pch

42/

No. 5263

Superintending Engineer's Office,
3rd Circle.
Bellary 1st February 1899.

From Lieut Col W. L. C. Baddeley R.E.
Esq.,
SUPERINTENDING ENGINEER,
IIIrd CIRCLE,
BELLARY.

To THE Chief Engineer
for Irrigation,
Madras.

Sir,

/ Enclosures.

Serial No 46 in Stock file

In reference to your No. III/2BL of 7th January 1899, I have the honour to forward a copy of letter No 561 of 27th January 1899 from the Executive Engineer Bellary Division, which answers the queries in paras 1 & 2 of your memo.

I agree with the opinions expressed by Mr Clerk.

2. As regards para 3 I make the area of the drainage basin of the Hagari, within British limits, to be 3057 square miles, of which 2412 drain direct into the river, and 645 into tanks.

I have the honour to be,
Sir,
Your most obedient servant,
W. L. C. Baddeley Lieut Col RE.
Supdg: Engineer, III Circle.

3-2-99.

47/

45

III

No 2 B2

S. E. III

With reference to the question
of asking the Mysore Govern
to provide compensation rate
from the Manikenava reserv
the S. E is requested to repo
at what period of the year
cultivation is carried on und
the tanks and channels in th
list received with his endors
No 1580 L dy 30 July 189
and whether there is any
direct irrigation from the
channels supplying tanks.
This reference should be
treated as urgent

2. In some papers received from
the Mysore Govt its asserted
that 6/7 ths of the Hagari
discharge occurs in the months
of Sept. and Oct. and that
the average discharge in other
months for the years 1863 to 1865
was as follows

January to April } nil

May 510 c.ft per sec.
June 765 "
July 173 "
August 524 "

Nov. } nil
Dec. }

It is argued from this, on the assumption that the irrigation in British territory is in the best interests, that and any rate after Oct., that irrigation in British territory will not suffer by the construction of the reservoir but on the contrary benefit by the surplus water in storage

estimated at 86 c.ft per second or $\frac{1}{5}$th of the quantity to be issued for irrigation. It is not known how further the argument is found and the S.E. to opinion is requested.

3. The drainage area of the Manikamma reservoir is about 2107 Sq. miles of which 1400 S.m. drain into Mysore territory. Below the reservoir there is a large area in Mysore territory of 3220 S.m. of which 2697 S.m. drain into tanks. The drainage area in British territory is said to be 3229 S.m. The S.E. should verify this and ascertain what is the area which drains to the tanks in Mysore territory. Have made April 94

It is argued from this, on the assumption that the irrigation in British territory is in the best interests, that and any rate after Oct., that irrigation in British territory will not suffer by the construction of the reservoir but on the contrary benefit by the surplus water in storage estimated at 86 c.ft per second or $\frac{1}{5}$th of the quantity to be issued for irrigation. It is not known how further the argument is found and the S.E. to opinion is requested.

3. The drainage area of the Manikamma reservoir is about 2107 Sq. miles of which 1400 S.m. drain into tanks. Below the reservoir there is a large area in Mysore territory of 3220 S.m. of which 2697 S.m. drain into tanks. The drainage area in British territory is said to be 3229 S.m. The S.E. should verify this and ascertain what is the area which drains to the tanks in Mysore territory. Have made April 94

6-1-95

Agent 6572
admit 5051.

E.I. Form No. 4—100—16-9-96.

Manikamma Project

PUBLIC WORKS DEPARTMENT.

IRRIGATION BRANCH.

H.E.
Hon'ble Mr Stokes
Hon'ble Mr Wrightson

READ the following:—

FOR ORDERS.

Manikamma Reservoir

A letter from the Resident in Mysore (No 6016/624-85 dt 30 Nov 1898) is submitted to Government for orders.

In my letter No III 28152 dt 21.6.98 the Supt Engr was asked to report the area irrigated from the main Stream of the Vedavati, and it may be necessary to consider whether works in Bellary can be improved so as to compensate for the reduced supply in the river when the Manikamma reservoir is constructed. The Supt Engr reported that there are 2525 acres under tanks and 5051 acres under Spring or river channels.

Mr Lawrence, who was acting SE thereupon submitted a note for orders in which he recommended that it should be stipulated that a low level sluice should be constructed in the dam to supply

230 c.ft per second this being the estimated full supply required for the whole area of 7876 acres. This recommendation was approved by Govt. and a letter embodying the stipulation (No 749 dy 28.9.98) was addressed to the Resident in Mysore. The letter was received since over to the reply of the Mysore Govt.

2. 230 c.ft per second is equal to nearly 600 mill. c.ft a month and if the supply were continued for the 7 months of the irrigating season the amount would be 4200 m.c.ft.

The catchment area of the reservoir is 2075 of which 1400 S. miles are said to drain into existing tanks, leaving 675 S. miles free. The total run off for the year can scarcely average more than 4 inches and if taken on the reservoir catchment at 3½ inches. During the irrigating season it would probably not exceed 3 inches which would yield 4700 m.c.f from the free catchment. A demand of 230 c.f.s. would therefore deprive the reservoir nearly if all the water it is likely to get from the free catchment and cause it dependent on the supplies from existing tanks. If is evident that if the demand is pressed the Mysore Govt would

— continued on 4 S/ 1 up

FOR ORDERS.

Letter from H. E. Clerk Esqr., Executive Engineer Bellary Division, No 661 dated 27th January 1899 to the Superintending Engineer III Circle, Bellary.

With reference to Memo No III dated from the Chief Engineer for Irrigation forwarded with your endorsement No 182 dated 20th January 1899. I have the honour to report that irrigation from the Hagari is as follows:—

Channels — Almost throughout the year.

Kanakal tank — July to December & February to June.

Other tanks — Dry crops from June to July to November.

Wet crops — from December to June.

In case of a heavy and early South-west monsoon a rice crop is started in July but this is unusual.

2. There is direct irrigation from the channel supplying Yeprant tank, and also from the channel supplying Kanakal tank.

3. With reference to the contention of the Mysore Government set forth in para 2, I consider that as far as river channels are concerned the contention of the Mysore Government is sound that they would not be injured by the construction of the new tank. I do not think that this holds with regard to tanks.

Kanakal tank which has an efficient supply channel receives supplies from small freshes in the Hagari in the months of June & July and is able to

green

grow a wet crop during the latter end of the calendar year.

If these small freshes are cut off as they will be in a great measure, it will be impossible for the tank to support more than one crop in the year.

The Jeffraut tank has not at present an efficient supply channel but when it has one it will be possible in the same way to grow two crops under the tank.

With regard to para 3. I beg to state that I have not the maps to check the figures therein given, and request that the necessary investigation may be made in your Office or in that of the Chief Engineer for Irrigation.

(True copy)

West Balladah Limited R.B.C.

Supdg. Engineer, III Circle.

4-2-27

Enclosure

FOR ORDERS.

give up their project.

3. There is another aspect of the question. The demand of a full supply for all the Bellary irrigation tacitly assumes that the irrigation is entirely dependent on drainage which will be impounded by the reservoir but this is very far indeed from being the case. Below the reservoir the drainage area of the river is 3220 S. miles in Mysore territory of which 523 S. miles are unoccupied by tanks and in British territory there is a drainage area, stated by the Mysore Secretary to be 322 S. miles the greater part of which must be unoccupied by tanks and above the last off take for irrigation.

4 On the whole I think it not improbable that the river supply will be reduced a good deal when the reservoir is not surplussing. The smaller height of the freshes may affect the supply of the flood channels but mostly the channels are spring channels the supply of which is affected not by the height but the frequency of freshes

FOR ORDERS.

No one can say how far the Bellary & Kurnool Canal irrigation will be affected by the construction of the reservoir. I am certainly of opinion that the waste water from the lands under the reservoir (unless the channels are very long and near the river) will not be full compensation. Regarding the Kurnool Canal the figures given by Col Wahab Brockman seemed to prove that the Zemindars get no water from the Vedavati at the most important period but the figures were for only one year and the water taken off by channels between the Galiappa and Sunkesula Anicuts was left out of account.

~~If I had taken part I should not have advised the Government to attempt to cancel the decision of 1894 on the matter as I think I showed in my remarks~~

The Mysore Govt. has taken the opportunity of again raising the question of its "rights". It is beyond my province to discuss them

If Govt. consider a compromise likely to be found practicable I should be obliged if Mr. Hughes would kindly submit such proposals. 8.4.H

This matter has been settled, and should not be re-opened. 8.4.H 29.12.98

7.5.1895 W.H.

Public Works (1898) Department.

IRRIGATION BRANCH.

III

ISSUE No. 2 B.L

46

To The Supg Engineer Do Cocd

(Reply to letter No. , dated)

Dated 6.1.99

Despatched 7.1.99

Enclosures *

* Particulars of Enclosures.

SUBJECT.

Mari Kanave Reservoir —

SE requested to report on certain points instead without unnecessarily with the question of asking the Govt to provide compensation by some cut to provide compensation water from the —

Indexed

Indexer
+ RK

After the file is disposed it should be passed on at once to RK to be kept in Cabt.

Init 7.1.99 Notified DR 8.1.99

E. I. Form No. 13—2,000—4-6-98.

BACK PAPERS.

No.	Date.

FURTHER PA

No.	

K 9SC 4-2-99

Sent to Government with No. I.,
dated 189 .
Printed with G.O., No. I.,
dated 189 .

REMINDERS ISSUED.

No. 1, dated 189 .
" 2 "
" 3 "
" 4 "
" 5 "

KEEP-WITHS.

Paper
Dwc 10017/98
A book of Correspondence relating to the Construction of the Marikanave Dam Virinjipuram Taluq Chittalbongipalli
G.O 156 3 dy 2-3-98
Original of G.O 748. 749 dy 28-9-98
Dwc 17624/98
Dwc 195/98
Office Roll from Mr to I. no 1470 dy 10-8-98
Dwc 7310/93
Dwc 4424/93
Dwc 1323/94
G.O. 75 dy 26-1-94
G.O. 1341 dy 26-5-98
G.O. 331 dy 31-3-92
G.O. 1341 of 26-5-98 (orig)
orig of G.O. 876-7 dy 28-3-98
do - G.O 440 dy 7-5-92
G.O 4133, 4143 dy 31-7-90
orig of G.O 62 dy 18-2-92
Orig of G.O 323, 324 dy 11-6-90
orig of G.O. 518, 519 dy 4-7-83
Stock file of Mysore Reservoir

Public Works (1898) Department.

IRRIGATION BRANCH.

ISSUE No. 9 B L

SERIAL No. 47

To

The Supg Engineer 3rd Circle

(Reply to letter No. 5269, dated 4/2/99)

Dated 28-2-99

Despatched —d—

Enclosures *

* Particulars of Enclosures.

SUBJECT.

Ycpraud and Kanakal Lands—
SE requested to ascertain, rough
and report for the information of
Govt how much is annually spe
by the D.P.W or the Revenue Dept
the Villagers in the Channels to
the —

Indexed

56

~~357~~ 57

~~Hon'ble Mr A. J. Arundel C.S.I.~~ ✓

~~Hon'ble Mr Hon'ble Mr Winterbotham~~

Note for Hon'ble Mr. Arundel.

With reference to the Hon: Member's note of the 22nd. inst. three sheets of the ordinance survey maps are submitted.

The position of the reservoir is shown in red and the catchment basin of the river above this is roughly shown by a red line.

The catchment basin of the Nagoy river down to its junction with the Jungalandam has been roughly shown by a blue shaded line.

As regards channels and lands which would be affected, the position of the Gerrard Canal and Channel and of the Kanakal Canal and Channel ~~to be~~ referred to in the Executive Engineer's report have been shown.

The position of the Sunkesala ancut

* fastened together for reference -

~~on sheet No. 59.~~

Maps examined & returned

MAtt 5.2.99

I am disposed to concur with the Hon'ble Mr. Arundel that no objection to the Dam must be raised

WS

2-3-99 -

on the Jungabandra
River supplying the
Kurnool Cuddapah
Canal is also
shown —

23/2/99

I. Form No. 4 (a)—500—14-1-93.

PUBLIC WORKS DEPARTMENT,
IRRIGATION BRANCH.

READ the following :—

Letter from the Resident in Mysore No. 6416/624.85 dy 30-11-98
Note for orders by the Jt. Secy to Govt. P.W.D. I.B. dy 15.12-98
Memo to the Supg. Engr. 3rd Circle No. III/2.B.2 dy 6. 1. 99.
Letter from the Supg. Engr. 3rd Circle. No. 526. I. dy 4. 2. 99
Reminder from the Resident in Mysore No 500 dy 4. 2. 99.

FOR ORDERS.

Please let me have a map showing site of reservoir, and roughly the catchment basin of the Hagry river, and catchment basin of the proposed reservoir within it. Also the roughly the position of the channels & tanks that will be affected by the reservoir. The ordnance map 4 miles = 1 inch will do.

Flagged B. MA
22.2.99

With reference to my note for orders dy 15. 12. 98 on the subject of the Maricanva Reservoir, I beg to submit reports received from the Supg. Engineer 3rd Circle, from which it will be seen that the irrigation from Spring Channels goes on almost throughout the year but the Superintending and Executive Engineers agree that this irrigation would not be affected by the Construction of the Reservoir. With regard to this the following points may be considered.

(1) I do not attach much importance to the statement of river discharge given in para 10 of the Mysore Secretary's letter, the Correspondence in the pamphlet evidently showing that very little is known about the discharge of the river and even as late

as 1892 (see page 132 of pamphlet) it seems to have been considered in the Chief Engineer's office that the gaugings of 1862 were the only reliable ones. These (See page 119) give an average of 72 cubic feet per second for the 6 months November to April. It seems improbable that there was no discharge at all, for 6 months of the year, during 3 years in succession, especially when it is considered that an area of 700 sqre miles drains freely to the river.

2) From February to May there will probably be no cultivation under the tank - the Secretary takes the cultivating season as seven months - and therefore during this period little or none of the tail waters referred to in para 11 of his letter. It is doubtful whether at any time there will be anything approaching the amount which he supposes but possibly the total which he gives will be made up by leakage from the channels if they follow the line described in pp. 100 to 104 of the pamphlet. I expect there will be no diminution,

Except

very M.A.

	Sqre miles
Above Reservoir	675
Below do - in Mysore	523
In Bellary	2412
	3610

Free area in Mysore {675 / 523}

" in Bellary above Kanakal Channel probable } 600

Except from February to May of the supply which replenishes the store of water in the river bed. From February to May there may be some diminution owing to the reduction of the free catchment from about 3600 to 2900 sqre miles. It cannot be proved that any appreciable harm will result from this.

2. With regard to the Tanks which are supplied by Channels with open heads, it is to be observed that as the river is some 800 ft wide the channels, although they are low level spring channels for the small area directly irrigated, cannot fill the tanks unless there is a fair depth in the river and the reduction of the total drainage area from 6169 to 4094 and the free area from 1798 to 1123 sqre miles, must certainly largely affect their supply. At the same time as they can draw off only a small percentage of the water in the river any supply which could be given from the Marikanva Reservoir would have quite an inappreciable

Effect

effect in the absence of
suits - Apparently the
only way in which Compensation
could be made to the ryots
would be to enlarge the
channels so that they
would take a larger
portion of the power
supply. It might be enabled
whether it is worthwhile
asking the Mysore Govt
to refund any reasonable
Expenditure incurred for
this purpose. It is not at
all known what the cost
would be. It would be
sufficient to increase
the capacity of the channels
by 50 per cent. I can only
suggest some proposal
of this kind as an alternative of the cost. But I anticipate
to the withdrawal of all that the amount will be so small
restrictions and conditions as to be not worthy of

3. Orders are requested as pressing.

The substance of the reply apart from this I think can
be sent to the Resident but objections must be waived
letter for which a Reminder
(No 500 of 4th July 1899) the project Durbar allowed
has been received - to complete the project.

KA 25.2.99.

W. Hughes
Joint Secy to Govt. P.W.D.

Let H.E. see. meantime
the information suggested on
Foreign Branch be got. The
Note
July Engr. in
Camp Cauvery has been requested to
Virudhachellum furnish the information required -
18th July 1899

WH 4.3.99

28/7/99

No. 6416 E
624.85

From

The Resident in Mysore.

To

The Secretary to the
Government of Madras
Public Works Department.

Dated Bangalore, 30th Nov 1898.

Sir,

With reference to your letter
No. 749 J. dated the 28th September
last, I have the honor to forward
with enclosure in original to be returned
Copy of a letter No. 29-361 dated
the 16th instant, from the Secretary
to the Government of Mysore P.W.
Department, containing the
views of the Durbar on the claim
of the Government of Madras
to a supply of water from the
proposed Marikanve Reservoir,
and to state that if after con-
sideration of the arguments

advanced by the Darbar the Madras Government still maintain the position as set forth in your letter under acknowledgment, the question will, as desired by the Darbar, be referred for the orders of the Government of India.

I have the honor to be,
Sir,
Your Most Obedt: Servant,

Dnd/ D Robertson
Resident.

24 65

Public Works (1898) Department.

IRRIGATION BRANCH.

ISSUE No. 774

To
The Resident in Mysore

(Reply to letter No. , dated)

Dated 9-3-99
Despatched 9-3-99
Enclosures *

* Particulars of Enclosures.

SUBJECT.

Marikanive Reservoir—
Forwards for information
Copy of telegram No. 10 dated ^ from the — and withdrawing the objection to the construction of the dam.

FOR

Please say whether this file may be passed on to Record Section in the usual course

H.D

Jpr
15/3/99

Please pass it on to Rk thro' the Indiger- Rk to join up with file herewith

Rk to recorded and return to Chief Secy to Govt

66

PUBLIC WORKS DEPARTMENT,

IRRIGATION BRANCH.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the

READ the following

Telegram from Resident in Mysore, & Political Dept transfer Endorsement, Nos. 30 dy 13 Feb 99 - 488 dy 16 Feb 99

To H.E.

Information asked for by the Hon. Mem. has been called for. Instructions are requisite whether the telegrams may not be sent.

4-299 WH

The following deferred telegram will be sent: -

To The Resident in Mysore.

"Your telegram 30 th instant not. Papers now before Govt. Hope reply can be sent to letter in few days."

WH

26/2

EE.

69

Public Works (1898) Department.

IRRIGATION BRANCH.

ISSUE No. 1182

SERIAL No. 148

To The Supg Engineer 3rd Circle

(Reply to letter No. 982, dated 28/2/99

Dated 8. 3. 99

Despatched 9. 3. 99

Enclosures *

* Particulars of Enclosures.

SUBJECT.

Yeprial and Kanakal Tanks
States that under the circumstances stated the S.E. need not make enquiries regarding the cost of maintenance of the Chls & the — but to report on the question of widening the Chls, stating clearly the extent to which the Chls will have to be widened and the probable cost

Indexed

70/

Paper
Igts 2199

71/

Herewith letter my Hon. Colleagues which our Agent has
to be dealt with.
The enquiry suggested by the Hon. the Financial
Secy in his Note of 25.2.99 should be
made.

A.H
8.3.99

[Poll. / 7]
1,000—20-4-98.

Political (1897) Department.

1420.

CURRENT No. ~~248~~

Telegram

From the Resident in Mysore.

Order Endt:- No 488, dy 16-2-97.

No. 30

Transferred to the Public Works Department.

G. Thomas
Chief Secretary.

Dated 13.2.97

Received 17
Registered 14. 2-97.

Enclosures

Spare copies.

Cmd 15/2/97

The papers now are before Govt. and it is hoped the reply can be sent to the Resident's letter in a few days.
19.2.97 WH

SUBJECT.

Stating that the Mysore Durbar represents that it will cause great loss to them if the Kanna project were stopped and that they are requesting therefore, to have an early decision.

Note

The letter & the reminder referred to have not been received in the Bd Secrett

A. 14/2/97

Telegram will be sent to Resident to ask him to send first the letter & then the telegram

Cmd

Rec'd 5 pm 14/2/97

WH

74

75

Public (1899) Department.

CURRENT No. 1154

Order

From The Resident in Mysore

No. 500

Dated 4—2—99

Received

Registered 37

Enclosures

Spare copies

SUBJECT.

Marikanve Reservoir

Requesting an early reply to his letter regarding

DEJ

10017/98

43

Secl

8/2/99

Public Works (1897) Department.

CURRENT No. 9352

Serial No. 46 A

From The Supty Engineer
3rd Circle
Batticaloa

Order

No. 526 J

Dated 4 — 2 — 99

Received 6 — do —

Registered 17-3-99

Enclosures 1 ✓

Spare copies

SUBJECT.

Iruthkanava reservoir

Forwarded. Batticaloa Executive Engineer's letter reporting the period of Irrigation 1st from the 14 tanks in connection with ——

78/

22 B.2 | 7-1-99

Public Works

4 79

(1898) Department.

CURRENT No. 10017

SERIAL No. 450

341.20 26.3.98

From The Residency Mysore

No. 6416
624.85

Dated 30-11-98.

Received

Registered 3 3.12.98

Enclosures 2

Spare copies

Book separately kept in this file

SUBJECT

Marikanve Reservoir
Regarding the claims of
the Entry leaders to a
supply of water from
the proposed —

D.E.I

P. W. 29.
1,000—548-98.

9/12/98

80/

Copy of letter no: 29/361, dated the 16th November 1898, from the Secretary to the Government of mysore. P.W.D. to the First Assistant Resident in mysore.

I am desired to acknowledge the receipt of your letter no: S.237/624.85, dated 3rd October 1898, and in reply to submit the following observations regarding the claim of the Government of madras for a supply of water from the proposed Marikanve Reservoir.

2. During the British administration of the State, the marikanve project was under investigation under the orders of the Government of India for many years and Considerable Sums of money were spent on Establishment and Survey and no objections whatever were raised on the ground that the work would prejudicially affect the irrigation in British territory.

3. When after the rendition of the State

State to native Rule the Mysore Durbar wished to commence the work, the Government of Madras refused to allow the Construction of the proposed Dam except upon certain prescribed Conditions as Specified in a Note no: 588. dated 17th March 1892, by the Chief Engineer for Irrigation, Madras. These Conditions were such as the Durbar were not prepared to accept, and in my letter No: 5436-903, dated 14th December 1892, it was pointed out why these Conditions were unnecessary, and the Madras Government were asked to re consider their decision with reference to the facts stated. No answer being received to this, a reminder was sent on the 24th January 1894, and to this a reply dated 26th February 1894, No. 772-624-55, was received from the 1st Assistant Resident in which it was stated "on reconsideration the Government of Madras withdraws its objection to the Construction of the proposed Marikanve Reservoir in the Mysore State"

4 It will be observed that the matter was under Consideration for about two years before the Madras Government came to the Conclusion to withdraw their objection to the Construction of the Reservoir This decision the Durbar of Course naturally took to be final and at once made arrangements for the investigation of the foundation for the dam, and applied for the Services of a Madras officer to serve on a Committee to Consider and report on the matter. In Communicating the Madras Government's Compliance with this application, the Joint Assistant Resident in para 3 of his letter No 1917 Dy 13th April 1898, Stated "The Madras Government observe that their nomination of an officer to serve on the Committee will be without prejudice to any further action it may be necessary to take, if their consent to the Construction of the project is hereafter applied for." on this the Durbar pointed out that the

× G.O. in Genl Branch not concerned (Papers obtained for Office information)

No 392/2392 Dy 29th April 1898

the Madras Government had finally waived their objection to the Construction of the reservoir, and the reply the 1st Assistant Resident expressed regret that the Correspondence, in which the Consent of the Govern[illegible]t of Madras had been given, had been overlooked.

5. The Durbar, being thus fully convinced that the matter was finally settled and that the Madras Government could not possibly impose any Conditions, having, after thorough Consideration for several years, given unqualified permission for the Construction of the Reservoir, at once made arrangements to carry out the work, and have already expended about Rs 1,50,000/- This will be so much money thrown away should the Madras Government adhere to the Condition they now impose; but the Durbar Cannot but help thinking that the later decision of the Madras Government has been arrived at without Sufficient Consideration being given to the facts as previously explained, otherwise, they are at a loss to understand how that Government could have altered a decision, arrived at after years of Consideration, especially as this alteration entails a loss of 1½ lacs to the impoverished State. If the Madras Government now Consider that they made a mistake in their first decision that is no fault of the Durbar, and it does not seem just that they should have to pay 1½ lacs for a mistake which was not their own.

6 The Conditions imposed by the Madras Government in 1892 were that arrangements should be made by which the whole discharge in the river Vedavati would be passed on, through or round the proposed Reservoir, whenever the water in the Tungabadhra was not up to the crest of the Sonkasala anicut, or whenever there was less than 3 feet depth on the crest of the Krishna anicut at Bezwada. These Conditions could not be accepted by the Durbar, and it was pointed out how unnecessary they were as regards the irrigation in British Territory and thereupon they

they were withdrawn by the madras Government. But the conditions now imposed by that government are far more exacting than those previously withdrawn and it is quite impossible that they can be accepted by the mysore durbar, and the project on which Rs 1,50,000/ have already been spent must be abandoned, if the madras government adhere to their present demand.

7. The terms now sought to be imposed are that a Sluice should be built in the Reservoir Dam Capable of discharging 230 cubic feet a Second for the irrigation, it is presumed, of an ayacut of 9366 acres in British Territory. How this quantity of water was arrived at is not clear, but it seems a large amount as it gives an irrigating duty of only 40 acres per cubic foot. The total area in mysore that it was calculated could be safely irrigated by the Reservoir was 30,000 acres, and if 9366 acres of land in

Madras Territory have to be supplied, the area that can be irrigated in the mysore Province will only be a little over 20,000 acres which materially alters the aspect of the project.

8. It is presumed that the madras government were aware of the area of wet Cultivation under the Vedavati in their territory at the time they gave their Consent in 1894 to the Construction of the dam, or if not, they had ample time and opportunity to, ascertain the same during the two years the matter was under their Consideration. At any rate, it is only reasonable to, assume that the madras ryots interested, and the madras Local officers Concerned failed to urge the irrigation claim of the 9366 acres in question, when the subject was under the investigation of the madras government between the years 1892 and 1894. This omission on their part is perhaps not to be wondered at, Considering the kind of irrigation which is carried on under the Vedavati in the madras Presidency

Appeared to me redundant

9

9. The Vedavati throughout its Course in Madras feeds no tanks nor are there any permanent anicuts across it (Vide Revenue Survey map of the Bellary Collectorate) By means of a few Channels of short lengths - more or less temporary in Character - some of the water in the river during the dry months is apparently used for irrigation. The use of the Vedavati for irrigation in the Madras Presidency is thus restricted to the precarious Supply of the dry months, while the large volume which the river Carries during the Monsoon months is allowed to flow uselessly to the Sea. The proposed reservoir at Harikanve can only reduce the monsoon Supply which is no where utilized. on the other hand it will, without doubt, very materially increase the Summer Supply to the great benefit of the entire tract of the Country through which the river flows.

The effect of the Reservoir will be to make a perennial river of what now is a mere dry Sandy bed for many months of the year, carrying high floods only during the Monsoon.

10. To go into actual figures, it is in the first place necessary to bear in mind that 6/7ths of the total annual discharge of the Vedavati at the Harikanve Gorge is received in the two months of September and October, as proved by the pre-Revision reports on the Subject. The average discharge in the other ten months of the year (as found by gauging for each month during the years 1863, 1864 and 1865) is as follows:-

January, February, March, April	0	May — 58 Cubic feet a Second June — 765 — do July — 173 — do August — 524 — do November, December	0

Thus it will be observed that during the Six months — November to April — the Supply is nil. During the next four months — May to August — (S.W. monsoon) the

the Suffly is so trifling that it is very doubtful if a drop of it ever reaches the madras frontier which is 70 miles away along the river Course. No doubt a large Suffly is received during September and October (the N.E. monsoon), but this is not used in any way. Thus the demand of the madras Government for 250 Cft per Second from the proposed Reservoir - to be taken it is presumed when wanted and not of Course during September and October when the rainfall would be so ample as to dispense with artificial irrigation - is absolutely without any foundation in prescriptive right of any Kind.

11. Not only will the proposed Reservoir not intercept any water now used in madras for irrigation, but it will be the means of giving a valuable new Suffly. For, when the Reservoir irrigates 30,000 acres as proposed, the tail water from this wet Cultivation which may be

be taken at 1/5th of the water Supplied for irrigation or 1/5th of 7834 million Cft; or 1567 million Cft of water, will be discharged into the river below the dam and part of it in close proximity to British territory. 1567 million Cft for the Seven months of the irrigation Season is equal to a discharge of 82 Cft a Second, while at present the discharge at the gorge is nil for three months out of the Seven, and for another one month it is below that quantity. So that it is evident that the construction of the Reservoir will be actually beneficial to madras.

12. Moreover it is worthy of note that, in Constructing the proposed Reservoir the Iyrbar are strictly within their natural right to the rain water which falls in their own territory. The Vedavati rises within the mysore state, and throughout its Course up to the frontier is fed exclusively by the rainfall in mysore. The proposed dam will thus impound only

This is true. The watershed is the boundary of mysore

only the rainfall upon Mysore lands, and this it is submitted the State has a perfect right to do.

13. The total catchment area of the Vedavati in Mysore territory is 5295 Square miles, of which 2075 Square miles are above the gorge and 3220 Square miles below. of the latter the drainage of an area of 2697 Square miles is intercepted by existing tanks leaving a free area of 523 Square miles, all the drainage of which flows into British territory. The average rainfall is about 24" and assuming $\frac{1}{7}$" as run off, which is the same amount as has been taken in the calculations for the reservoir, the discharge at the point where the river enters British territory will be 4166 million cft. which is Sufficient for the irrigation of abaut 15,000 acres, the area of cultivation in British territory being only 9366 acres. Even taking a bad year of 15" rainfall and allowing a run off of only $\frac{1}{8}$th the discharge will be 2278 million cft. Sufficient for the irrigation of 8700 acres and if the tail water from the irrigation from the Reservoir be added there will be more than sufficient water for the irrigation of the 9366 acres in British territory. Hence the Dam will do absolutely no harm. These Calculations entirely omit the drainage area in British territory which amounts to 309 Square miles, and the run off from which, taking $\frac{1}{7}$th of 24", would give 25,700 million cft. or Sufficient for the irrigation of abaut 90,000 acres.

14. It is evident from these figures that there is Sufficient water in the British territory alone in average years to irrigate nearly ten times the amount of the present wet Cultivation, if proper arrangements were made for its storage & distribution, and that the water received from the Mysore territory even after the Construction of the Dam will be Sufficient in a bad year

year to irrigate all that land.

15. The Suffly may be precarious, that is, in some months it may be deficient. But this is a matter for which a remedy should be sought by the Construction of Storage tanks in madras territory and not by means of the present demand for a Suffly from the Marikanve Reservoir proposed to be built by the mysore state for the benefit of its people in a tract peculiarly liable to drought and famine. Indeed, it is the protective and not the remunerative character of the work that constitutes its chief claim for early execution by the Durbar. It directly benefits the driest part of the rainless District of Chitaldrug. The Settlement papers of the Hiriyur Taluk (wherein would be most of the new irrigation) teem with facts and figures which prove the great importance of a work of this kind for this part of the Country. Major Prescott's report dated 18th April 1868 said —

"4. This is the poorest Taluk yet assessed by the Revenue Survey department, and, I imagine, the most sterile in the Principality. There are but 33½ inhabitants to the Square mile, the average assessment of the Same area by the Revenue Survey being a little over Rs 6½. The average assessment of the culturable area by the Revenue Survey is 4 annas, and 8 pies only, and this is higher than the General appearance of the Country Seems to warrant, and is occasioned by the good black Soil which prevails in places."

"5. The average assessment of waste culturable lands is 2 annas and 9 pies, and in the third class villages 2 annas 3 pies only."

"6. Looking at the population, the pressure of the late assessment Seems light enough, averaging, as it does, Rs 1. 4. 2 for each inhabitant. This is increased by the Survey to Rs 1. 7. 11 for each inhabitant

or

or about 17 per cent.

" 18. Of the total area of this portion of the taluk, 306,693 acres, 200,794 acres (including village sites, rivers, tanks &c) or 65 per cent, are uncultivable.

" 19. Of the cultivable area (105,699 acres) 66,883 acres or 63 per cent, are cultivated, and 39,016 or 37 per cent, are waste.

" 21. The proportion of wet crop to dry is about 1/24 acre of the former to 24 of the latter or $3\frac{3}{4}$ per cent of the whole cultivated area. This is a very small proportion, indeed, and shows the necessity of caution in assessing this description of land, for it is to be borne in mind that all wet crop cultivation requires capital as well as labour.

" 30. Irrigation is the source from which increased Revenue is to be looked for, and nowhere is it more required than in this poor Taluk. If even the present wet area, which, as before stated, is but $3\frac{3}{4}$ per cent of the whole cultivated area, should be doubled, it would be a great thing for the Country. Without water this Country is a sterile plain, one remove only from desert (where famine and disease is always stalking abroad) with water it would soon be covered with waving crops of rice, and capable of maintaining double its present population.

Mr. Bowring's order dated 1st may 1868, sanctioning the Settlement, said—.

"2. It is well known that Hiriyur is the most barren Taluk in the Province, and the Commissioner observes that if the population is only $33\frac{1}{2}$ to a Square mile, as stated in your letter, no better evidence can be given of its present condition, but it is hoped that when the Marikanve, the Hemmarkatte and other irrigation works are carried out, the Character of this part of the Country will improve. It is noted that the average assessment of the Cultivable area is only 4as. 8p. and that of Cultivable waste 2as. 9p. and even as low as 2as. 3p. on inferior lands; and that, although

these

there were no remissions; the average Collections for 20 years indicate a Stagnant State of things and much depression, the average of Rs 18,663/- being much the Same as the revenue of the 1st year 1847-48 which amounted to Rs 18,715/-, showing little progressive improvement. It is remarked that 2/3rds of the whole area is uncultivable, and that of the remaining one-third, only 2/3rds are Cultivated, that is, the entire Cultivation is, as compared to the whole area, only as 2 is to 9 or less than 1/4.

"3. Under these Circumstances, the Commissioner Considers that the rates proposed, are certainly not too low. They are on an average for dry land 4 as. 3 p; for rice Rs 1. 14. 4 & for garden Rs 3/-, or a total of 5 as. 10 p. Mr. Bourne is not sure whether it would not have been better to lower the dry rate still more, so that its average should not exceed the old average of 3 as - 10 p; the great object being to attract people to

to this part of the province, so as provide labour for the large irrigation now projected.

"4. I am directed to add that proposed assessment on Cultivable was would also need proportionate reduct cies might be lowered to as 2."

The Establishment of irrigation on the large Scale contemplated in the Cent of a tract so constantly liable to drought and famine, is a protective work wh value cannot be gauged in money. Duri the great famine of 1877-79 this tract Suffered more than any other in the province, and lost a third of its sparse population. And the Durbar Sincerely hope that upon due Consideration of the fa above Set forth, the Madras Government will be able to withdraw its objection to the execution of this most important protective work.

16. Should unfortunately the Madras Government decline to withdraw its objection

the

The Durbar beg that the matter may be Submitted for the Consideration and orders of the Government of India together with the following observations in addition to the facts and arguments Set forth in the preceding paragraphs;-

1st In Constructing the Periyakanve reservoir, the Durbar are merely executing a project which the Government of India during its administration of the State had duly investigated, and actually resolved upon, and upon which it had expended Considerable Sums of money. The accompanying printed Correspondence contains the history of the project.

2ndly On the right of the Durbar under the ordinary law to carry out this work it is submitted that

(a) a Supply of water which it is proposed to store, and use for irrigation is exclusively dependent upon the rainfall on mysore land. We have a natural right to Collect, and dispose of all water which falls on the Surface of our land, and though, as between private owners Such natural right would be restricted to water not flowing in a defined Channel yet it would be obviously unreasonable to apply Such a restriction as between two neighbouring States. A State has to deal with large interests, and establish means of irrigation, and water Supply over extensive areas, and it Cannot always effectually dispose of Surface drainage before it enters some defined Channel.

(b) The Case of the Vedavati is not that of a Stream rising outside the mysore State and merely flowing through it into the Madras District. The obligations which may exist in respect of a Stream of this Kind do not therefore arise in the Case of the Vedavati.

(c) No right of easement by prescription Can be claimed in the present case on behalf of the Madras ryots (assuming that Such a limiting right as an easement can at

it all be acquired by madras ryots against the mysore State) for the essence of a prescriptive right is enjoyment and use, which cannot be predicated of what is allowed to run to waste. The proposed reservoir, as a matter of fact will merely hold back river floods now running to waste. Moreover a right of easement can never be acquired by a mere permissive user. It cannot be said that mysore never intended to store its rainfall in the locality in question to a greater extent that it used to do at some remote period. It is indeed more reasonable to infer that the user in question (if one really existed) was permitted to be in force only so long as the State did not wish to store the water. As a matter of fact the history of the project bears ample testimony to the mysore Government having always intended to store and utilize as much as the Vedavati water as possible, and presumption of a grant from prescriptive

enjoyment is therefore most distinctly and expressly negatived in this case, and

(d) Even in the case of private riparian owners they have the natural right to use the water flowing through their land in a defined Channel for all reasonable purposes, including the irrigation of land, provided they do not thereby destroy or materially diminish or affect the application of the water by riparian owners lower down the stream, either in exercise of their natural right or right of easement (See Embrey & Rhodes, 6, Exch: 372 and XI Indian Law Reports, madras, Cases in Appendix

Assuming for the sake of argument that this well recognized principle of municipal Law is applicable to the case of two neighbouring Provinces the facts of the case in question (as explained in the preceding paras) show that in Constructing the proposed Reservoir, mysore is making no more than a reasonable use of the river within its frontier, and

5. The burbar do not however

rest their case upon the purely legal aspect
the question. They submit that it is one
for the decision of the Government of India
with due regard to the equitable Consideration
to which the State is entitled not only by
reason of the history of the project during
the British administration of the Province,
but also owing to the deliberate decision
of the Madras Government in 1894 on the
faith of which the Barbar have already
spent about 1½ lacs on the work. Thus
finally, the Barbar beg to submit
that the whole question is one for the
decision of the Government of India
as the paramount authority upon
the higher grounds of public welfare,
general prosperity and protection against
recurring famines.

Copy

King Emperor

for Registrar

Rec'd 10 OCT 15

11-1-28 BIII

12.2.25 BIII

12/6/64 /DL