R.N.416
P.W.C.No. 7488
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(1) பக்கங்களின் எண்ணிக்கை _____

(2) புதுக்கித் திருப்பிய நாள் _____

(3) ஆதாரங் குறிப்பவர் சுருக்கொப்பம் _____

தமிழ்நாடு ஆவணக் காப்பகம்.

தமிழ்நாடு அரசு

P.W.D பொதுப்பணித் துறை

அரசாணை எண்.	அச்சகம்
மு. கோப்புத் தாள் எண். 2671 2672	பலவகை
நாள் : 12-10-1886.	199 .

மடிக்கவோ கண்டபடி கையாளவோ கூடாது.

ஆவண. கா. 1—18,006—6-9-90.

செப்பமிடுபவர் பெயர்
செப்பமிடுவதற்காக எடுத்துக்
கொள்ளப்பட்ட நாள்
செப்பமிட்டு முடித்த நாள்
சரிபார்க்கும்
மு. பார்
கையொப்பம்
ஆராய்ச்சி
உதவியாளர்
கையொப்பம்

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper:—

No. 81 E.W.

Note by the Chief Engineer for Irrigation.

From the accompanying statement showing the grants from 1882-83 to 1886-87 and the probable demands from 1887-88 to 1889-90 under 48. Capital Expenditure on Public Works (not charged against Revenue), Irrigation, it will be observed that the Sangam anicut, the Barur tank, and the Cauvery delta works are expected to be completed in 1887-88, the Srívaikuntham anicut system in 1888-89, and the Godávari delta and the Pennér (Nellore) anicut systems in 1889-90, so that there will remain in progress in 1890-91 only the Kistna delta works. It is desirable that the question of providing funds for commencing next year the Periyár project, which has been duly sanctioned by the Secretary of State and is awaiting provision of funds, should be taken into consideration. Several works now in progress will be far advanced towards completion by the end of the current year. The highest total demand for expenditure from loan funds in the next three years, including the Periyár project, will be, respectively, Rs. 3,07,510, 1,42,510, and 1,93,510 less than the grant for 1884-85. It is therefore suggested that the Government of India may, with reference to paragraph 2 of their letter, No. 35 A.I., dated 26th March 1886, be requested to accord permission for acquiring the land required for the Periyár project and for making other preliminary arrangements for commencing work next year.

CHEPÂK, (Signed) J. PENNYCUICK, Lieut.-Col., R.E.,
24th September 1886. Offg. Chief Engineer for Irrigation.

To the Chief Engineer, Public Works Department.

ENCLOSURE.

STATEMENT showing the grants from 1882-83 to 1886-87 and the probable demands for 1887-88, 1888-89, and 1889-90 for Capital Expenditure on Irrigation Works (not charged against Revenue).

—	Estimates.	Outlay to end of 1885-86.	Final Grants for				Budget grant for 1886-87.	Probable amount for 1887-88.	Probable amount for 1888-89.	Probable amount for 1889-90.
			1882-83.	1883-84.	1884-85.	1885-86.				
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Godávari delta ..	1,10,88,695	1,03,14,976	2,67,770	3,91,951	4,18,684	2,90,175	3,36,000	3,00,000	75,300	62,419
Kistna delta ..	1,38,99,784	70,37,598	2,68,397	4,43,131	5,15,643	3,82,263	4,80,000	5,84,699	5,72,901	5,73,166
Pennér (Nellore) anicut	16,12,789	14,44,374	..	..	..	37,000	73,000	45,000	36,000	14,415
Sangam anicut ..	28,96,437	24,58,071	4,96,757	5,93,470	6,22,901	4,91,585	3,77,000	61,366	..	..
Barur tank project ..	4,00,000	2,33,123	..	11,003	38,391	84,627	1,16,000	56,877	..	..
Cauvery delta ..	16,59,305	15,43,233	28,185	1,33,558	1,90,510	2,36,510	1,01,000	15,067	..	..
Srívaikuntham anicut.	13,61,520	13,12,721	21,352	54,240	13,381	9,849	22,000	10,000	16,799	..
Total ..	3,29,18,530	2,43,44,101	10,82,461	16,27,353	18,29,510	15,32,000	15,05,000	10,67,000	7,01,000	6,50,000
Periyár project ..	61,85,000	..	..	..	..	..	..	4,55,000	9,86,000	9,86,000
Grand Total ..	3,91,03,530	2,43,44,101	10,82,461	16,27,353	18,29,510	15,32,000	15,05,000	15,22,000	16,87,000	16,36,000

(Signed) J. PENNYCUICK, Lieut.-Col., R.E.,
Offg. Chief Engineer for Irrigation.

ORDER—dated 12th October 1886, No. 2671 W., Public Works.

Ordered that the Government of India be addressed.

(Here enter No. 2672 W., dated 12th October 1886.)

(True Extract.)

Colonel, R.E.,
Secretary to Govt., P.W.D.

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

Exd. E. Fernandez.
Spare Copies

2

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1886) Madras.

PUBLIC WORKS.

Dated October, 12th.

Read. *Encl.*

G.O., 12th Oct. 1886, No. 2671 W.

OCTOBER.

Periyar Project

Orders on note by the Officiating Chief Engineer for Irrigation urging the desirability of commencing the — next year.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

LETTER—from

COLONEL J. O. HASTED, R.E.,

Secretary to the Government of Madras,

Public Works Department,

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,

PUBLIC WORKS DEPARTMENT.

SIR,

With reference to your letter, No. 35 A.I., dated 26th March 1886, I am directed to forward a note by the Chief Engineer for Irrigation, together with a statement showing the probable demands for Capital Expenditure on Irrigation Works (not charged against Revenue) for the years 1887-88, 1888-89, and 1889-90, from which it will be observed that, in consequence of several of the projects approaching completion, the demand on account of works in progress will decrease from Rs. 10,67,000 in 1887-88, to Rs. 6,50,000 in 1889-90, the budget grant for the current year being Rs. 15,05,000.

2. I am to say that His Excellency the Governor in Council quite understood from your letter under reply that the existing financial pressure prevented the immediate commencement of any work of magnitude, but he believes when that letter was written the probability of several of the works in progress being shortly completed was not contemplated, and that the Government of India were looking forward to having to provide a sum of about fifteen lakhs yearly for expenditure on these works. Under these circumstances he desires to urge on the Government of India the desirability of commencing the Periyár project, a work which is expected, as the Government of India are aware, to prove very remunerative, as well as of great value to the country as a Famine Protective Work.

3. It will be seen from the statement that the prosecution of this work will entail the grant of only Rs. 15,22,000 next year, Rs. 16,87,000 the following year, and a little over sixteen lakhs in subsequent years; and, looking to the small amount of the grants to this presidency for years previous to those mentioned in the statement, I am to say that His Excellency in Council trusts that the Government of India will consider the demand, even under existing circumstances, is moderate.

I have the honor to be,

Sir,

Your most obedient servant,

Colonel, R.E.,
Secretary to Government.

FORT ST. GEORGE,
12th October 1886.

Exd. E. Fernandez.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1886} Madras.

PUBLIC WORKS.

Dated October, 12*th*.

Read. *Encl.*

12th Oct. 1886, No. 2672 W.

OCTOBER.

Periyar Project

Forwarding, with remarks, note by the Officiating Chief Engineer for Irrigation urging the desirability of commencing the — next year.

16 Sheets

Appendix to G.O., No. 862 *I., dated 9th December* 1886.

No. 172 I.

Note by the Chief Engineer for Irrigation.

With reference to Resolution of the Government of India, No. 81 A. I., of 1st November 1886, the undersigned has the honor to draw attention to the extent to which the demands made by this Government for Irrigation works have been reduced—

Under 35. (Protective) the demands and grants are as follow :—

	Demand.	Grant.	Percentage of Grant to Demand.
	Rs.	Rs.	
Madras	5,00,000	3,00,000	60·00
Other provinces	23,24,400	22,00,000	98·08

Under 42. Major Works (working expenses) they are :—

	Demand.	Grant.	Percentage of Demand to Grant.
	Rs.	Rs.	
Madras	10,75,000	10,00,000	93·02
Other provinces	19,17,600	19,17,600	100·00

2. Although the reduction under "Protective" is considerable in proportion to that made from the demands from other provinces, it does not seem necessary to submit any remonstrance on the subject; the only two works concerned (the Buckingham canal and the Rushikulya project) though important are not vitally so, and the delay in their completion though regrettable is not a very serious evil.

3. Under the second head of Major Works (working expenses), the provisional grant though less than is considered desirable for the efficient maintenance of the works, is not so much less as to cause any serious risk of deterioration or loss of revenue during the next year.

4. Under the next head, 43. Minor Works and Navigation, the reduction is not only more serious in amount, but the provisional grant is so small as in the opinion of the undersigned to be absolutely insufficient for the proper maintenance of the works.

5. The following table shows the revenue dependent on works of this class in Madras and other provinces, the demand for 1887-88, and the provisional grant for that year. The North-West Provinces are left out of consideration because it is understood that the bulk of the works of the class in question have been provincialized, and the small grant of Rs. 6,000 made for the next year is probably for some special purpose, the nature of which is not known :—

—	*a* Revenue from Minor Works.	*b* Demand for 1887-88.	*c* Provisional grant for 1887-88.	Percentage of		
				b to *a*.	*c* to *a*.	*c* to *b*.
	Rs.	Rs.	Rs.			
Madras	1,07,57,000	34,09,000	20,00,000	31·60	18·60	58·67
Bombay	33,75,000	23,66,000	15,75,000	70·10	46·66	66·57
Bengal	7,75,000	7,00,000	6,75,000	90·32	87·10	96·43
Punjab	13,57,000	6,55,000	6,51,000	48·27	47·97	99·39

6. It appears from the above that while the allotment to Madras is only 58·67 per cent. of the amount considered by the Government to be necessary, that to other provinces varies from 66·57 to 99·39, the average being 77·96 per cent.; and the disproportion is even more striking if the revenue dependent on the works is taken into consideration, the grant to other provinces varying from 46·96 per cent. of the revenue in Bombay to 87·10 per cent. in Bengal, while to Madras it is only 18·60 per cent.

7. It may be said at once that it is absolutely impossible for the works to be kept in order for the sum allotted; the average of the expenditure for the four years previous to 1886-87 having been Rs. 22,63,986. and this expenditure is, to say the least, not in excess of what is necessary for the efficient maintenance of the works.

8. The expenditure from 1883-84 to 1885-86 includes a total of Rs. 5,74,871 on the "Tank Maintenance Scheme," and the omission of this sum would reduce the average expenditure during the four years named to Rs. 21,20,278. As no grant for this purpose has been made for 1887-88, it is probable that the Government of India have accepted the view of the Finance Committee that the Tank Maintenance expenditure is not legitimately chargeable to ordinary maintenance and should, if incurred at all, be considered as a Capital charge, money being borrowed by the Provincial Government for the purpose.

9. It is therefore necessary to state clearly and decidedly that there is absolutely no difference between the work executed from the Tank Maintenance grant and that executed from the ordinary maintenance grants.

10. The Finance Committee in paragraph 275 of their note define as "Ordinary Repairs" "*repairs whose object is to prevent the Land Revenue from falling off*" and a Tank Restoration work "*for increasing the storage of water and thereby increasing the irrigated area and the Land Revenue arising from it*," and are evidently under the impression that the greater part, if not the whole of our Tank Maintenance expenditure, comes under the latter definition.

11. So far from this being the case, the undersigned has no hesitation in saying that 99 per cent. of the expenditure in question comes under the first definition and is by the Finance Committee's own showing legitimately chargeable to ordinary repairs.

12. Every proposal for increase of storage of water or extension of irrigation has been rigidly excluded from the consideration of the Tank Maintenance establishment, and the small increase of revenue expected from the operations of the latter is due entirely to the securing of the existing irrigation and the prevention of remissions and of land being thrown out of cultivation by the tanks breaching or being in such bad order as to be unable to irrigate the full extent of land under them.

13. The principles of grouping of tanks, of providing each tank taken up with proper and efficient weirs and sluices, of fixing standard levels, and of dealing with the tanks in each group from the top downwards, are simply those which have been followed in the ordinary work of the department for the last 15 years; the only speciality of the Tank Maintenance operations being the rather more elaborate record of the hydraulic, financial and topographical details of the works dealt with, and the more rigid adherence to the general principles detailed above, which in ordinary work had occasionally to be departed from under pressing necessity for the repair of breaches and other work required for the immediate protection of crops and revenue dependent on them. All this was repeatedly explained to the Finance Committee by Colonel Hasted, and it is somewhat surprising that they should still adhere to their preconceived and entirely erroneous ideas on the subject.

14. The Finance Committee suggest that the money required for this purpose should be borrowed by the Provincial Government on certain terms detailed in paragraphs 277 to 279 of their note, and if it cannot be obtained in any other way, it would be better to follow this course than to allow the works to deteriorate and the revenue to fall off; but however the money be obtained, it ought to be clearly understood that it is simply an addition to the ordinary grant for maintenance, and not anything of the nature of Capital expenditure.

15. The demand for Capital expenditure (not charged against Revenue), as submitted by this Government, amounted to Rs. 15,22,000, but the provisional grant

made is only Rs. 9,80,000, the reduction being due to the omission of Rs. 4,55,000 proposed for the Periyár project and the reduction of the grant for the Kistna delta works from Rs. 5,84,690 to Rs. 5,00,000.

16. The former reduction is in some respects more serious and important than any that has been made in the proposals of this Government; the importance of the work is so well known that it is unnecessary to go into detail here; but it may be observed that it is now ten years since the last famine in the Madura district, and that every year's delay diminishes the chance of the completion of this work before the occurrence of the next famine.

17. Under the circumstances, it is submitted for consideration whether some stronger remonstrance than has yet been made should not now be raised against the further postponement of a work which will render a famine in the Madura district an impossibility.

18. What may be the relative values of Railway and Irrigation works for protection against famine is a question which need not be considered here, seeing that no railway that can in the remotest degree affect the tract of country benefited by the Periyár project has ever been proposed.

19. It does not appear that the present financial crisis is a sufficient reason for deferring the execution of a work which will ultimately return a net revenue exceeding by three lakhs of rupees annually the interest on its cost; while being constructed with borrowed money it will throw no immediate burden on the finances of the State.

20. If the Government of India cannot be induced to make a grant from Imperial funds for the prosecution of this work, it is suggested that the Local Government should undertake to carry it out provincially on the terms suggested in the note by the Finance Committee printed with G.O. (Financial Department), No. 1102, of 26th October 1886.

CHEPÂK, 1st December 1886.

(Signed) J. PENNYCUICK, Lieut.-Col., R.E., Offg. Chief Engineer for Irrigation.

To the Offg. Joint Secretary to Government,
Public Works Department, Irrigation Branch.

CONFIDENTIAL.

Notes of a Conference held at Guindy Park on November 16th, 1886.

PRESENT:

His Excellency the Governor of Madras.
Hon'ble Sir Theodore C. Hope.
" C. G. Master.
" E. F. Webster.
" H. E. Stokes.
General Hancock, R.E.
Colonel C. J. Smith, R.E.
" Pennycuick, R.E.

The following decisions were arrived at:—

1. That there is no objection to the Bellary-Kistna Railway being worked by the Southern Mahratta Railway Company, or to that Company's acquiring the line and completing it to Hindupur, as lately proposed by them.

2. That the Cuddapah-Nellore Railway, as now under construction, might be very suitably given to be worked by the South Indian Railway Company.

3. That the acquisition by that Company of the line under construction and its extensions from Tirupati to Dharmaveram and Pakal to Villupuram, on a basis similar to that suggested by the Southern Mahratta Company in the case of the Bellary-Kistna, is very desirable.

4. That the transfer of the supervision of the construction of the Bellary-Kistna and Cuddapah-Nellore Railways from the Director-General of Railways to the Madras Government is not desirable under present circumstances.

5. That, in view of the probable sanction of the commencement of the Bezwara extension of the Nizam's Railway at a very early date, the Madras Government will appoint a Deputy Collector to make inquiries preliminary to the acquisition of the land according to the land-plans received from Mr. Furnival.

6. That the supervision of the construction of this line by the Company on behalf of the British Government be entrusted to the Consulting Engineer for Guaranteed Railways, Madras.

7. That the Madras Government will furnish to the Government of India a memorandum on the present carrying capacity of the Buckingham Canal, and other information bearing on its use for the carriage of Singareni coal, to be prepared by Colonel Pennycuick.

8. That the Madras Government will have no objection to place the services of Colonel C. J. Smith at the disposal of the Government of India about the end of the year, for a short time, as Member of a Committee on Statistical and other work now performed by the office of the Director-General of Railways.

(Signed) T. C. HOPE.

No 81 Eis

Note by the Chief Engineer for Irrigation

Encl 1

From the accompanying statement showing the grants from 1882-83 to 86-87 and the probable demands from 1887-88 to 89-90 under 48 Capital expenditure on Public works (not charged against revenue). Irrigation, it will be observed that the Sangam Anicut and the Cauvery delta works (the Baver tank) are expected to be completed in 1887-88, the Vaigai Anicut System in 1888-89 and the Godavari delta and the Penner (Nellore) Anicut Systems in 1889-90, so that there will remain in progress in 1890-91 only the Kistna delta works. It is desirable that the question of providing funds for commencing next year the Periyar project which has been duly sanctioned by the Secretary of State and is awaiting provision of funds, should be taken into consideration. Several works now in progress will be far advanced towards completion by the end of the current year. The highest total demand for expenditure from loan funds in the next three years including the Periyar project will be respectively Rs 307,510 142,510 and 173,510 less than the grants for 1884-85. It is therefore suggested that the Govt of India may, with reference to para 2 of

Statement showing the Revenue due to Irrigation in each Province for 1884-85

	Major works	Minor works and Navigation	Total	Remarks
Madras	32,33,916	107,57,450 ×	139,91,366	× Includes Rs 27,50,337 the share due to old irrigation under Major works deducted in the Revs: accounts of those works to deduce the increase of revenue due to the improvements carried out by the British Govt
Bombay	8,39,197	33,74,907	42,14,104	
Bengal	13,07,521	7,75,000	20,82,521	
N. W. Provinces	70,68,977	2,25,045	72,94,022	
Punjab	30,29,336	13,57,386	43,86,722	

24.11.86.

Statement shewing the grants from 1882-83 to 86-87 and the probable demands for 1887-88, 88-89 and 1889-90 for Capital expenditure on Irrigation works not charged against Revenue.

	Estimated	Outlay to end of 1885-86	Annual grants for 1882-83	1883-84	1884-85	1885-86	Budget-Grant-for 1886-87	Probable amount for 1887-88	Probable amount for 1888-89	Probable amount for 1889-90
Godavari Delta	110.88.695	103.14.976	2.67.770	3.91.951	4.18.684	2.90.175	3.36.000	3.00.000	75.300	62.419
Kistna do	138.99.781	70.37.598	2.68.397	4.43.131	5.15.643	3.82.263	4.80.000	5.84.690	5.72.901	5.73.166
Penner (Nellore) Anicut	16.12.789	14.44.374	"	"	"	37.000	73.000	45.000	36.000	14.415
Sangam Anicut	28.96.437	24.58.071	496.757	593.470	6.22.901	491.585	37.000	61.366	"	"
Bezwada tank project	4.00.000	233.123	"	11.003	68.391	84.627	1.16.000	50.877	"	"
Cauvery Delta	46.59.305	15.43.238	28.185	133.558	190.510	236.510	1.01.000	15.067	"	"
Sriviakuntham Anicut	13.61.520	13.17.721	21.352	54.240	13.381	9.840	22.000	10.000	16.799	"
Total	329.18.530	243.44.101	10.82.461	16.27.353	18.29.510	15.32.000	15.05.000	10.67.300	7.01.000	6.50.000
Periyar project	61.85.000	"	"	"	"	"	"	4.55.000	9.86.000	9.86.000
Grand total	391.03.530	243.44.101	10.82.461	16.27.353	18.29.510	15.32.000	15.05.000	15.22.000	16.87.000	16.36.000

Lt Colb. R.E.
Offg Chief Engineer for Irrigation

24-9.

Sec. to Govt. of India

With reference to Govt. letter
No. 35 A. I. dated 26th March 188.
I am directed to forward a note
by the Chief Engr for Irrigation
together with a Statement showing
the probable Demands on account
for Capital Expenditure on Irrigation
works not charged against Revenue
for the years 1887-88 1888-89
and 1889-90. From which it will
be observed that in consequence of
several of the Projects approaching
Completion, the demand on account
of works in progress will decrease
in 1887-88 1889-90
from 13,67,000 Rs to 6,50,000 Rs.
The Budget grant for the current
year being 15,05,000 Rs.

2. I am also to request that
Govt. in Council will understand

2671W - 2672W

3 Sd 16.4.86.
2 Pbd. 24.5.86.
2867 41.12.05
3 Sd 9 8.5.86.
462 d. 3.7.86.

26912

B & R
Works

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

dated Octr 12. 1886

READ the following

Note by the Officiating Chief Engineer for Irrigation } No. 81 Ex. d/24.9.86

Ordered that the Government of India be addressed.

(No. 2672 Ex/12.10.86)

To,

The Secretary to the Government of India, P.W.D.

Sir,

With reference to your letter No. 35 A.I, dated 26th March 1886, I am directed to forward a

CE for Irrigation with 6 plans
SE VI Circle
EE Pdkt Circle
Asst dept.
Asst dept with 2 plans
sd 12/86

2 I am to say that His
the Governor in Council
quite understood from your
letter under reply that the
existing financial pressure
prevented the immediate
commencement of any work of
magnitude, but he believes
when that letter was written
the probability of several
of the works in progress
being shortly completed, was
not contemplated, and that
the Govt of India were
looking forward to having
to provide a sum of about
15 lakhs yearly for expendi-
-ture on these works under
these circumstances he

duce to expend the
Gift of India the desirability
of removing the Import
Duty on Petroleum, which is
exported, as the Gift of
India are aware, to prove
very remunerative, as well
as of great value to the
country as a Famine
Protective Work.

3 It will be seen from
the statement shewn in the
Appendix of this publi-
cation that the Gift of
India are aware that of
only 15,22,000 Rs net paid
16,59,000 Rs the following
year and a little more
than 16 lakhs in subsequent
years, and lastly that the
small amount
~~outstanding~~ of the grants
to this Presidency for years
previous to those mentioned
in the statement, I am to
say that His Excellency
in Council trusts that
the Gift of India will
consider the demand, even
under existing circumstances,
is moderate.—

Sec
11/10/86

Dercd
15/10/86

16 C.R. 7489

Govt. of 1880 [illegible]

PUBLIC WORKS

Serajgunj Project

Dated

Rec'd

Regd

G.O. Oct. 12 1886. No. 2671

2672-80

Serajgunj Project

Forwarding with remarks
note by the Offg. C.E. for S.
urging the desirability of
commencing the Lock