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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P.W DEPARTMENT

G.O. No. 1877-78 W Press.
~~B.P. No.~~ ~~Mis.~~

Dated 26-7-1886 ~~196~~

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1/1877-78

26TH JULY 1886, No. 1877 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Civil Works.
Irrigation.

READ—the following paper:—

No. 57 E.W.

Note by the Chief Engineer for Irrigation.

As, under the orders restricting expenditure, the Project divisions, which were started in 1882 with the object of working out projects which might be sanctioned either as productive or protective public works or might be available for employment of labor as famine relief works, are now about to be abolished, it is considered advisable to lay before Government the results of their labors; and the best method of so doing seems to be to take the statements Nos. III and IV printed with G.O., No. 465 L., dated 13th June 1882, showing the projects which had been proposed and those in progress or to be taken up in order of importance, and recast them so as to show by references what has been done and what still remains as proposed to be done at some future time.

2. In the second column, headed References, the letters A, B, &c., have the following meanings:—

A—Works completed or in progress.
B—Works sanctioned but not commenced.
C—Estimates ready; work could be put in hand at short notice.
D—Partially investigated and left so that work can be taken up again.
E—Abandoned.
F—Being revised or investigated under Superintending Engineers.
G—May be subsequently investigated.

3. Under A there are three works, namely—

(1) Pennagoondapuram tank; completed.
(2) Barur channel; in progress and will probably be completed next year.
(3) Pálár anicut completion project; in progress.

4. Under B there is only one work—the Periyár project, which is waiting allotment of funds.

5. Under C there are nine works—

(1) Marandahalli project.
(2) Vaniar reservoir.
(3) Hindupur reservoir.
(4) Roddum reservoir.
(5) Sugglair project.
(6) Peddapasula channel irrigation.
(7) Upper Bellary project.
(8) Lower Coleroon anicut project.
(9) Calingarayen channel.

For the last three of these the estimates have not yet been received, but the plans have been partly examined by the undersigned on the spot, and the proposed works have been to some extent discussed with the Superintending Engineers, and it seems probable that the last two may prove productive works, and the first a protective work. All the works would be available for the employment of famine labor, but it must be allowed that, as most of them include much work which can only be executed by skilled labor, they are not the most desirable description of famine relief work, which should be simple earthwork when possible.

6. The works under D are only three—

(1) Krishnagiri reservoir.
(2) Bhavání reservoir.
(3) Anamalanka project.

On the first of these a great deal of work has been done, and the project could be worked out in a few months; but at present there is no certainty that the work would promise well. On the second a good deal of work has been done, and it seems probable that a large reservoir here would prove a most valuable work, irrigating a considerable extent of country besides helping to regulate the floods in the Cauvery, which often prove disastrous to the Tanjore delta. The third work was investigated a long time ago, and has been laid aside till the Godávari delta works are completed.

7. The works classed under E and detailed in the statement may, it is considered, be finally abandoned and left out of all future statements of projects to be investigated.

8. Those under F are still left to be investigated as opportunity offers, but, so far as it is known, there is little probability of any one of them proving of great value as an irrigation work.

9. Attached to the above statement is another list showing works which were not proposed in 1882 but have since been proposed or estimated for, and which might be of use as famine relief works. Of these the Ganjam-Gopálpur canal has been sanctioned, but its execution is postponed until the Rushikulya project is further advanced, as there is little doubt but that the available labor would not suffice to carry out both works at the same time. The diversion of the Kurnool canal at Tangadancha is intended to obviate the risk of a breach which is incurred by strong monsoon winds acting on the great extent of the Tangadancha tank. It would be a great improvement, and has been estimated for by the Executive Engineer; but for want of funds the work has been postponed.

The Kurnool canal distributaries are being estimated for by the division officers, and some of the estimates have been prepared. The works will be carried out as funds permit, but it is likely to be some years before they will be completed. Should occasion arise, they can be proceeded with at any time.

The boat canal at Dumagudem is not likely to be recommended for execution, but might be taken up as a relief work.

The improvement of the West Coast canals, it was hoped, would have been commenced by this time, but no funds are available. The estimate has, in part, been prepared and is being worked out. Should relief work be necessary on the West Coast, this would be a suitable work.

The Cheyár embankment has been estimated for, but no funds are available; it would make a good relief work, though small.

The Sámalkót-Tuni canal, which would form a part of the continuation of the coast navigation northward, would need a great deal of preliminary work before it could be commenced, but it would make a good relief work.

The drainage of Tanjore is a work which needs attention and can now only be taken up piece-meal. It was, however, found, during last famine, that there was great difficulty in bringing down labor from the districts suffering from famine into the deltas, and it is much better, if possible, to start works in the distressed districts.

10. It may be well, in conclusion, to say a few words on the scheme of work for the immediate future for the presidency, now that, as shown in the accompanying lists, several projects have been wholly or partially worked out.

The works at present in progress are the Godávari and Kistna completion projects, the Sangam project, the Pennér completion project, the Pálár completion project, the Barur project, the Cauvery and Vennár regulators, the Srivaikuntham project, the Rushikulya project, and the Buckingham canal. Of these, Sangam, Barur, Cauvery and Vennár, and Srivaikuntham will be virtually completed next working season; the Pennér and Pálár will not require many seasons' work; the Godávari is also approaching completion, and the Rushikulya, Kistna, and Buckingham canal will continue for some years. It is hoped that the Periyár, which has been sanctioned, will take the place of those first completed, and then the Colingaroyen channel improvement is considered of next importance; after it, the Lower Coleroon improve-

ments. The Upper Bellary project estimates have not yet been submitted, but if the modified project now being worked out proves feasible, the importance of extending irrigation in Bellary would give it the first place among works to be carried out.

The most important large work is then the Bhavání reservoir, the estimates for which should be worked out as soon as opportunity offers; as, so far as investigations have gone, it seems that this project will afford the best opportunity of extending irrigation considerably.

Some minor projects, such as the Sugglair, might at the same time be undertaken if funds permitted. Most of the above are irrigation works which will probably prove remunerative and also be of value as famine protective works, but there are also the coast canals, which it is desirable should be pushed on with if funds can be made available. The improvement of the West Coast water communication has, it is considered, great claim on Government, and if Provincial funds can be spared, this work should go on without reference to the irrigation works, with the progress of which it would not interfere.

(Signed) J. O. HASTED, Colonel, R.E.,
Chief Engineer for Irrigation.

OOTACAMUND,
5th July 1886.

To the Chief Engineer, Public Works Department.

ENCLOSURES.

STATEMENT No. IV, printed with G.O., No. 465 L., dated 13th June 1882.

No.	Reference.	District.	Name of work.	Amount of estimate.	Remarks.
				Rs.	
1	A.	Salem ..	Penniagoondapurnia tank..	71,416	Work carried out.
2	C.	Do. ..	Marandahalli project ..	4,65,278	Plans and estimates prepared.
3	A.	Do. ..	Barur channel	4,25,500	Estimates revised. Work in progress.
4	C.	Do. ..	Vaniar reservoir ..	17,07,427	Plans and estimates prepared.
5	D.	Do. ..	Krishnagiri reservoir ..	About 14,00,000	Project partially worked out; left so that it can be taken up without delay when necessity arises.
6	F.	Do. and Coimbatore.	Nattanjipett anicut	..	Plans and estimates under revision by Executive Engineer.
	D.		Bhavání reservoir	..	Project partially worked out; left so that it can be taken up without delay when necessity arises.
7	G.	Salem ..	Dodamally reservoir ..	..	Site examined and favorably reported on in 1872; nothing since done.
8	G.	Coimbatore ..	Allandudy reservoir ..	About 1,00,000	Proposed. Nothing done.
9	G.	Bellary ..	Hindisinar reservoir ..	About 1,00,000	Plans and estimates prepared.
10	G.	Do. ..	Rachúr reservoir ..	1,75,000	Do. do.
11	G.	Madura ..	Periyár project ..	64,61,483	Sanctioned by Secretary of State; allotment of funds awaited.
12	C.	Cuddapah ..	Sugglair do. ..	About 7,05,000	Plans and estimates prepared; under revision by Executive Engineer.
13	G.	Kurnool ..	Tangedancha Doralla tank restoration.	About 20,00,000	Preliminary reports received; nothing since done.
14	G.	Cuddapah ..	Anicut on Papaday ..	Proposed. Nothing done.	
15	C.	Do. ..	Peddapasula channel irrigation.	2,360	Plans and estimates prepared.
16	G.	Kurnool ..	Venkatareddiyelluru tank restoration.	About 26,956	Preliminary report made in 1876; nothing since done.
17	G.	Do. ..	Atmakur tank restoration..	About 20,000	Nothing done.
18	G.	Do. ..	Kalavatala tank project..	50,000	Partially investigated in 1871; nothing since done.
19	G.	Do. ..	Duvulair project	..	Partially investigated in 1877; nothing since done.
20	G.	Do. ..	Taikoor reservoir	..	Do. do. do.
21	E.	Do. ..	Davanapilly reservoir ..	..	Partially investigated by Madras Irrigation and Canal Company and abandoned.
22	G.	Do ..	New tanks south of Arvacad.	..	Proposed. Nothing done.
23	G.	Do. ..	Gorladinna tank ..	..	Do. Do.
24	G.	Do. ..	Tank sites in Markápur taluk.	..	Do. Do.
25	G.	Bellary ..	Rachcherla project ..	13,96,610	Estimates returned to Superintending Engineer in 1877; nothing since done.

Statement No. IV, printed with G.O., No. 465 I., dated 13th June 1882—contd.

No.	Reference.	District.	Name of work.	Amount of estimate.	Remarks.
				Rs. About	
26	G.	Bellary ..	Potnicaconta tank project.	16,000	Partially investigated prior to 1877; nothing since done.
27	G.	Do. ..	Mylapore Huggry reservoir.	..	Do. do. do.
28	E.	Ganjam ..	Mulfada Tampara project.	30,700	Estimate is being revised by the Executive Engineer.
29	C.	Bellary ..	Upper Bellary project ..	..	Plans and estimates of modified project nearly ready for submission.
30	A.	North Arcot ..	Pálár anicut completion project.	19,93,893	Estimate sanctioned, and work in progress.
31	E.	Tinnevelly ..	Pápanasam reservoir ..	..	Site inspected by the Chief Engineer for Irrigation and proposal abandoned.
32	E.	Trichinopoly ..	Vengur channel project.	28,210	Project ordered to be abandoned by Government.
33	F.	Do. ..	Kodanthoray tank do.	15,000	Estimates prepared and under consideration by Superintending Engineer.
34	C.	South Arcot and Tanjore.	Lower Coleroon anicut project.	..	Surveys and estimates completed; will be submitted shortly.
35	C.	Coimbatore ..	Púgalur channel ..	1,07,500	Abandoned in favor of extension of Calingarayen channels, plans and estimates for which have been completed and will be submitted shortly.
36	G.	Do. ..	Channel from Bhavání to Noyel.	..	Nothing done since 1879.
37	G.	South Arcot ..	Athur project	..	Nothing done since 1873.
38	G.	North do. ..	Cheyár river ..	..	Do. do.
39	G.	Do. do.	Pallagacherry channel project.	..	Do. do.
40	G.	Nellore ..	Restoring Adurapillai tank.	15,000	Suggested in 1879; nothing done since.
41	G.	Do. ..	Restoring Timalapady tank.	26,000	Do. do.
42	G.	Do. ..	Restoring Gandipolan tank.	1,00,000	Do. do.
43	G.	Chingleput ..	Improving irrigation under Narmavenum river.	3,00,000	Partially investigated in 1869-70; nothing done since.
44	F.	Do. ..	Channel from anicut at Tamarupakam.	..	Under consideration of Superintending Engineer.
45	D.	Godávari ..	Annamalanka project ..	..	Further irrigation left of Godávari delta works not completed.
46	G.	Nellore ..	Gundlacotta reservoir ..	..	Proposed. Nothing done.
47	E.	Kurnool ..	Great Kistna do. ..	..	Do. do.
48	E.	Madura ..	Tank in Thalinoth Mannoor valley.	1,20,000	Abandoned, Periyar project having been sanctioned.
49	E.	Do. ..	Palni reservoir ..	1,46,056	Do. do. do.
50	E.	Do. ..	Gullapuram reservoir ..	6,70,000	Do. do. do.
51	E.	Do. ..	Reservoir near Bathagunda.	..	Do. do. do.

Works in contemplation that might be available as famine relief works.

No.	District.	Name of work.	Amount of estimate.	Remarks.
			Rs.	
1	Kurnool ..	Kurnool canal diversion at Tangadancha.	60,000	Estimates prepared; work could be marked out at once.
2	Do. ..	Kurnool canal distributaries ..	4,00,000	Plans and estimates under preparation; some are understood to be ready.
3	Ganjam ..	Ganjam-Gopálpur canal ..	4,51,145	Estimates sanctioned by the Secretary of State; work not to be commenced till Kaukikulya is further advanced.
4	Godávari ..	Coast canal from Durnagdem to Bhadrachalum.	4,65,360	Estimate prepared; under revision by Superintending Engineer.
5	South Canara ..	West Coast canals	..	Estimates partly ready; being prepared by Superintending Engineer.
6	Chiddapah ..	Cheyér embankment	47,750	Estimates prepared and waiting for allotment of fund.
7	Godávari ..	Sámalkót-Tuni canal	..	Project partially investigated by A Project division; survey and estimate necessary.
8	Tanjore ..	Drainages	..	Subject is under investigation by Superintending Engineer.

(Signed) J. O. HASTED, Colonel, R.E.,
Chief Engineer for Irrigation.

3/1877-88

ORDER—dated 26th July 1886, No. 1877 W., Public Works.

Ordered to be forwarded for the information of the Government of India, with advertence to this department letter, No. 466 I., dated 13th June 1882.

2. The remarks in the last paragraph of the Chief Engineer's note, relative to the improvement of the West Coast canals, will be communicated to the Financial Department.

(Here enter No. 1878 W., dated 26th July 1886.)

(True Extract.)

Major, R.E.,
Under Secy. to Govt., P.W.D.

To the Chief Engineer for Irrigation.
To Superintending Engineers.
To the Superintendent of Works, Tank Maintenance Scheme.
„ Financial Department.
„ Revenue „

Exd. E. Fernandez
Spare Copies

CIVIL WORKS.
IRRIGATION.

Govt. of [1886] Madras.

PUBLIC WORKS.

Dated July, 26th.

Read. *Encl.*

G.O., 26th July 1886, No. 1877 W.

JULY.

Projects

Orders on a note by the Chief Engineer for Irrigation reporting what has been done and what has yet to be done with the several irrigation and other — in the Madras presidency.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Civil Works.
Irrigation.

READ—the following paper :—

No. 57 E.W.

Note by the Chief Engineer for Irrigation.

As, under the orders restricting expenditure, the Project divisions, which were started in 1882 with the object of working out projects which might be sanctioned either as productive or protective public works or might be available for employment of labor as famine relief works, are now about to be abolished, it is considered advisable to lay before Government the results of their labors; and the best method of so doing seems to be to take the statements Nos. III and IV printed with G.O., No. 465 I., dated 13th June 1882, showing the projects which had been proposed and those in progress or to be taken up in order of importance, and recast them so as to show by references what has been done and what still remains as proposed to be done at some future time.

2. In the second column, headed References, the letters A, B, &c., have the following meanings :—

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E.—Abandoned.
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3. Under A there are three works, namely—

(1) Pennagoondapúram tank; completed.
(2) Barur channel; in progress and will probably be completed next year.
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4. Under B there is only one work—the Periyár project, which is waiting allotment of funds.

5. Under C there are nine works—

(1) Marandahalli project.
(2) Vaniar reservoir.
(3) Hindupur reservoir.
(4) Roddum reservoir.
(5) Sugglair project.
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For the last three of these the estimates have not yet been received, but the plans have been partly examined by the undersigned on the spot, and the proposed works have been to some extent discussed with the Superintending Engineers; and it seems probable that the last two may prove productive works, and the first a protective work. All the works would be available for the employment of famine labor, but it must be allowed that, as most of them include much work which can only be executed by skilled labor, they are not the most desirable description of famine relief work, which should be simple earthwork when possible.

6. The works under D are only three—

(1) Krishnagiri reservoir.
(2) Bhavani reservoir.
(3) Amarsianka project.

On the first of these a great deal of work has been done, and the project could be worked out in a few months; but at present there is no certainty that the work would promise well. On the second a good deal of work has been done, and it seems probable that a large reservoir here would prove a most valuable work, irrigating a considerable extent of country besides helping to regulate the floods in the Cauvery, which often prove disastrous to the Tanjore delta. The third work was investigated a long time ago, and has been laid aside till the Godávari delta works are completed.

7. The works classed under E and detailed in the statement may, it is considered, be finally abandoned and left out of all future statements of projects to be investigated.

8. Those under F are still left to be investigated as opportunity offers, but, so far as it is known, there is little probability of any one of them proving of great value as an irrigation work.

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The Sámalkót-Tuni canal, which would form a part of the continuation of the coast navigation northward, would need a great deal of preliminary work before it could be commenced, but it would make a good relief work.

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10. It may be well, in conclusion, to say a few words on the scheme of work for the immediate future for the presidency, now that, as shown in the accompanying lists, several projects have been wholly or partially worked out.

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The most important large work is then the Bhavání reservoir, the estimates for which should be worked out as soon as opportunity offers; as, so far as investigations have gone, it seems that this project will afford the best opportunity of extending irrigation considerably.

Some minor projects, such as the Sugglair, might at the same time be undertaken if funds permitted. Most of the above are irrigation works which will probably prove remunerative and also be of value as famine protective works, but there are also the coast canals, which it is desirable should be pushed on with if funds can be made available. The improvement of the West Coast water communication has, it is considered, great claim on Government, and if Provincial funds can be spared, this work should go on without reference to the irrigation works, with the progress of which it would not interfere.

Ootacamund, 5th July 1886.

(Signed) J. O. HASTED, Colonel, R.E., Chief Engineer for Irrigation.

To the Chief Engineer, Public Works Department.

Enclosures.

Statement No. IV, printed with G O., No. 465 I., dated 13th June 1882.

No.	Reference.	District.	Name of work.	Amount of estimate.	Remarks.
				Rs.	
1	A.	Salem ..	Pennagoondapuram tank.	77,416	Work carried out.
2	C.	Do. ..	Marandahalli project ..	4,69,878	Plans and estimates prepared.
3	A.	Do. ..	Barur channel	4,25,300	Estimates revised. Work in progress.
4	C.	Do. ..	Vaniar reservoir ..	17,07,427	Plans and estimates prepared.
5	D.	Do. ..	Krishnagiri reservoir ..	About 40,00,000	Project partially worked out; left so that it can be taken up without delay when necessity arises.
6	F.	Do. and Coimbatore.	Nerrinjipett anicut ..	..	Plans and estimates under revision by Executive Engineer.
	D.		Bhavani reservoir ..	..	Project partially worked out; left so that it can be taken up without delay when necessity arises.
7	C.	Salem ..	Goodamally reservoir ..	..	Site examined and favorably reported on in 1878; nothing since done.
8	G.	Coimbatore ..	Allamahaly reservoir ..	..	Proposed. Nothing done.
9	C.	Bellary ..	Hindupur reservoir ..	About 1,95,000	Plans and estimates prepared.
10	C.	Do. ..	Roddam reservoir ..	About 1,74,000	Do. do.
11	E.	Madura ..	Periyár project ..	64,41,463	Sanctioned by Secretary of State; allotment of funds awaited.
12	C.	Cuddapah ..	Sugglair do. ..	About 7,03,100	Plans and estimates prepared; under revision by Executive Engineer.
13	G.	Kurnool ..	Talarycheruvu Dyalla tank restoration.	About 20,00,000	Preliminary report received; nothing since done.
14	G.	Cuddapah ..	Anicut on Papaday ..	..	Proposed. Nothing done.
15	C.	Do. ..	Peddapasula channel irrigation.	54,860	Plans and estimates prepared.
16	G.	Kurnool ..	Venkatareddipolliem tank restoration.	About 46,000	Preliminary report made in 1876; nothing since done.
17	G.	Do. ..	Arveed tank restoration ..	About 30,000	Nothing done.
18	G.	Do. ..	Kalavatala tank project ..	50,000	Partially investigated in 1871; nothing since done.
19	G.	Do. ..	Duvulair project ..	..	Partially investigated in 1877; nothing since done.
20	G.	Do. ..	Taikoor reservoir ..	..	Do. do. do.
21	E.	Do. ..	Davanapilly reservoir ..	..	Partially investigated by Madras Irrigation and Canal Company and abandoned.
22	G.	Do. ..	New tank, south of Arveed.	..	Proposed. Nothing done.
23	G.	Do. ..	Garladinna tank ..	..	Do. Do.
24	G.	Do. ..	Tank sites in Márkápur taluk.	.. ..	Do. Do.
25	G.	Bellary ..	Bookacherla project ..	18,35,040	Estimates returned to Superintending Engineer in 1877; nothing since done.

Statement No. IV, printed with G.O., No. 465 I., dated 13th June 1882—*cont.*

No.	Reference	District.	Name of work.	Amount of estimate.	Remarks.
				Rs. About	
26	G.	Bellary ..	Poodicoonta tank project.	16,000	Partially investigated prior to 1877; nothing since done.
27	G.	Do. ..	Mylapore Huggry reservoir.	..	Do. do. do.
28	F.	Ganjam ..	Mullada Tampara project.	30,700	Estimate is being revised by the Executive Engineer.
29	C.	Bellary ..	Upper Bellary project ..	..	Plans and estimates of modified project nearly ready for submission.
30	A.	North Arcot ..	Pálár anicut completion project.	15,98,893	Estimate sanctioned, and work in progress.
31	E.	Tinnevelly ..	Pápanasam reservoir ..	..	Site inspected by the Chief Engineer for Irrigation and proposal abandoned.
32	E.	Trichinopoly ..	Vengur channel project.	28,210	Project ordered to be abandoned by Government.
33	F.	Do. ..	Koduntheray tank do.	15,000	Estimates prepared and under consideration by Superintending Engineer.
34	C.	South Arcot and Tanjore.	Lower Coleroon anicut project.	..	Surveys and estimates completed; will be submitted shortly.
35	C.	Coimbatore ..	Pugalur channel ..	1,67,500	Abandoned in favor of extension of Coimbatore channels, plans and estimates for which have been completed and will be submitted shortly.
36	G.	Do. ..	Channel from Bhavani to Noyel.	..	Nothing done since 1879.
37	G.	South Arcot ..	Athur project	..	Nothing done since 1879.
38	G.	North do. ..	Chevar river	..	Do. do.
39	G.	Do. do. ..	Pullagancherry channel project.	..	Do. do.
40	G.	Nellore ..	Restoring Adurapillai tank.	15,000	Suggested in 1869; nothing done since.
41	G.	Do. ..	Restoring Timalapady tank.	20,000	Do. do.
42	G.	Do. ..	Restoring Gundipalem tank.	1,00,000	Do. do.
43	G.	Chingleput ..	Improving irrigation under Narnaveram river.	5,00,000	Partially investigated in 1869-70; nothing done since.
44	F.	Do. ..	Channel from anicut at Tamarapakam.	..	Under consideration of Superintending Engineer.
45	D.	Godávari ..	Annamalanka project ..	..	Further investigation left till Godávari delta works are completed.
46	G.	Nellore ..	Gandicotta reservoir ..	..	Proposed. Nothing done.
47	E.	Kurnool ..	Great Kistna do. ..	..	Do. Do.
48	E.	Madura ..	Tank in Thalinooth Manoor valley.	1,29,000	Abandoned, Periyár project having been sanctioned.
49	E.	Do. ..	Pulni reservoir ..	1,46,056	Do. do. do.
50	E.	Do. ..	Gullapuram reservoir ..	6,70,000	Do. do. do.
51	E.	Do. ..	Reservoir near Pathagunoo.	..	Do. do. do.

Works in contemplation that might be available as famine relief works.

No.	District.	Name of work.	Amount of estimate.	Remarks.
			Rs.	
1	Kurnool ..	Kurnool canal diversion at Tungadancha.	60,000	Estimates prepared; work could be marked out at once.
2	Do. ..	Kurnool canal distributaries ..	4,00,000	Plans and estimates under preparation; some are understood to be ready.
3	Ganjam ..	Ganjam-Gopálpur canal ..	4,51,146	Estimates sanctioned by the Secretary of State; work not to be commenced till funds allow further advances.
4	Godávari ..	Boat canal from Dumagudem to Bhadrachalam.	4,56,800	Estimate prepared; under revision by Superintending Engineer.
5	South Canara ..	West Coast canals	..	Estimates partly ready; being prepared by Superintending Engineer.
6	Cuddapah ..	Cheyer embankment	17,750	Estimates prepared and waiting for allotment of fund.
7	Godávari ..	Mánikur-Tuni canal	..	Project partially investigated by A Project division; survey and estimate necessary.
8	Tanjore ..	Drainage	..	Subject is under investigation by Superintending Engineer.

(Signed) J. O. HASTED, Colonel, R.E.,
Chief Engineer for Irrigation.

6/1877-78

ORDER—dated 26th July 1886, No. 1877 W., Public Works.

Ordered to be forwarded for the information of the Government of India, with advertence to this department letter, No. 466 I., dated 13th June 1882.

2. The remarks in the last paragraph of the Chief Engineer's note, relative to the improvement of the West Coast canals, will be communicated to the Financial Department.

(Here enter No. 1878 W., dated 26th July 1886.)

(True Extract.)

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Chief Engineer for Irrigation.
To Superintending Engineers.
To the Superintendent of Works, Tank Maintenance Scheme.
,, Financial Department.
,, Revenue ,,

ENDORSEMENT—dated 26th July 1886, No. 1878 W., Public Works.

Forwarded.

Major, R.E.,
Under Secy. to Govt., P.W.D.

Exd. E. Fernandez.
Spare Copies

CIVIL WORKS.
IRRIGATION.

Govt. of {1886} Madras.

PUBLIC WORKS.

Dated July, 26th.

Read. *Encl.*

G.O., 26th July 1886, No. 1878 W.

JULY.

Projects

A note by the Chief Engineer for Irrigation reporting what has been done and what has yet to be done with the several irrigation and other —— in the Madras presidency forwarded to the Government of India.

No 57 Encl 1 / 1877-8

Note by the Chief Engineer for Irrigation

Encl 2 Rds

As under the orders preceding Report-ture, the Project Divisions which were started in 1882 with the object of working out Projects which might be classed either as Productive or Protective Public Works or might be available for employment of labor as Famine Relief works, are now about to be abolished, it is considered advisable to lay before Government the results of their labors, and the lessons which seem to be to take the statements Nos III & IV framed under G.O. No 465, I dated 13th June 1882 showing the Projects which had been surveyed and those in progress or to be taken up in order of importance, and to record how far each of these projects has been carried out, and what remains to be done, and will be required to be done at some future time.

2. In the 2nd Column have used the letters A. B. & C. to denote the following meanings.

A = works completed or in progress

B = Works sanctioned but not Commenced.

C = Estimates ready - work could be put in hand at short notice.

D = Partially investigated and left so that work can be taken up again.

E = Abandoned.

F = Being revised or investigated under Superintending Engineer.

G = May be subsequently investigated.

3 - Under A - there are 3 works viz

(1) Pennagondapuram Tank completed.

(2) Barur channel - In progress and will probably be completed next year.

(3) Palar Anicut Completion Project In progress.

4 - Under B. there is only one work - the Perriyar Project which is waiting allotment of funds.

5. Under C. there are 9 works

(1) Manandahalli Project

(2) Vanivar Reservoir

(3) Hindupur Reservoir

(4) Raddam Reservoir

(5) Suggdair Project

(6) Peddapanda channel Irrigation

(7) Upper Pothay Project.

(8). Lower Coleroon Anicut Project

(9) Cadiganoyen channel.

for the last three of these, the estimates have not yet been received, but the plans have been partly examined by the undersigned, on the spot, and the proposed works have been to some extent discussed with the Supg. Engineer and it seems probable that the last two may prove Protective works and the first a Protective work - All the works would be available for the employment of famine labor, but it must be allowed that as many of them as include much work which can only be executed by skilled labor they are not the most desirable description of famine relief work, which should be simple earthwork when possible.

6 - The works under D. are only three.

(1) Kistnagiri Reservoir

(2) Bhavani Reservoir

(3) Arunadanka Project.

In the first of these a great deal of work has been done and the Project could be worked out in a few months, but at present there is no certainty that the work would prove well. In the second a good deal of work has been done but

it seems probable that a large reservoir here would prove a most valuable work, irrigating a considerable extent of country besides helping to regulate the floods in the Cauvery which often prove disastrous to the Tanjore Delta. The third work investigated a long time ago and has been laid aside till the Godavari Delta works are completed.

7. The works classed under E. and detailed in the statement may it is considered be finally abandoned and left out of all future statements of Projects to be investigated.

8. Those under F. are still left to be investigated as opportunity offers but so far as it is known there is little probability of any one of them proving of great value as an irrigation work.

9. Attached to the above statement is another, list showing works which were not proposed in 1882 but have since been proposed or estimated for, and which might be of use as Famine Relief works. Of these the Tanjore

Gopalpur Canal has been sanctioned but its execution is postponed until the Rushikulya Project is settled the Engineer adds there is little further advance & no there is little doubt but that the available labor would not suffice to carry out both works at the same time, The Diversion of the Kurnool Canal at Tungabadra is intended to obviate the risk of a breach which is incurred by strong winds acting on the great extent of the Tungabadra bank, it would be a great improvement and has been estimated for by the Executive Engineer, but for want of funds the work has been postponed.

The Kurnool Canal distributaries are having estimates for by the Division officers and some of the estimates have been prepared, the works will be carried out as funds permit, but it is likely the some years before they will be completed should occasion arise they can be proceeded with at any time.

The Bored Canal at Dumagudem is not likely to be recommended for execution but might be taken up as a Relief work

The improvement of the West Coast Canal which it was hoped would have been commenced by the

time

time, but no funds are available the estimates have, in part, been prepared and is being worked out. Should relief work be necessary on the West Coast, this would be a suitable work.

The Cokenada embankment has been estimated for, but no funds are available, it would make a good relief work though small.

The Samalkotta Junc Canal which would form a part of the Continuation of the Coast Navigation Northward would need a great deal of preliminary work before it could be commenced but it would make a good relief work.

The drainage of Tanjore is a work which needs attention and can now only be taken up piecemeal - it was however found during last famine, that there was great difficulty in bringing down labor from the districts suffering from famine into the Deltas, and what much be done, if possible to start works in the distressed Districts.

10. It may be well to conclude with a few words on the method of work for the immediate future, for the Presidency now that, as shown in the accompanying List, several Projects have been wholly or partially worked out.

The works at present in progress are the Godavari & Kistna Completion Projects, the Tungam Project, the Penner Completion Project, the Palar Completion Project, the Barner Project, the Cauvery and Vennaur Regulators, the Krishnavatham Project and the Rushikulya Project. Of these Tungam, Barner, Cauvery & Vennaur and Krishnavatham will be virtually completed next working season, the Penner & Palar will not require many seasons work, the Godavari is also approaching Completion and the Rushikulya and Kistna will continue for some years. It is hoped that the Perrinjanur, which has been sanctioned will take the place of those first Completed, and then the Cuddapah channel improvement is considered of next importance, after it, the Lower Coleroon Improvements. The Upper Bellary Project estimates have not yet been submitted, but if the modified Project now being worked out proves feasible, the importance of extending irrigation in Bellary would give it the first place among works to be carried out.

The most important large work

17/1877-78

between the Bhavani Reservoir, the estimates for which should be worked out as soon as opportunity offers, so far as surveys &c have gone it seems that the project with effort the best opportunity of extending irrigation considered.

Some minor Projects, such as the Sheffair, might advantageously be undertaken if funds permitted, but for large irrigation works which will probably prove remunerative and also be of value as Famine Protective works, but there are also the Coast Canals which it is desirable should be pushed, per with if funds can be made available. The improvement of the West Coast water Communication should be considered as great Claim on Government such as Provincial funds can be spared the work should go on without reference to the irrigation works with the progress of which it would not interfere.

Coimbatore
1st July 1876

Jas Caldecott Colonel R.E.
Chief Engineer for Irrigation

To
The Chief Engineer
P.W.D.

G.O. 4.6.82. 4665 J. 13.6.82.

S.W.C. 1.3542

67

Ack. 12.7.82.

Statement N° IV. printed & with G.O. N° 465. J. 7/13 June 1882

12/1877-28

Sl.	Division	District	Name of work	Amt of Estimate Rs	Remarks
1	A	Salem	Paramagonda-puram Tank.	77,416	Work carried out.
2	C	—do—	Guravadahully Projet	469,978	Plans and estimates prepared.
3	A	—do—	Baran Channel	425,300	Estimates revised - work in progress.
4	C	—do—	Vanivar Reservoir	1,707,427	Plans & estimates prepared.
5	D	—do—	Kistnagiri Reservoir	about 40,00,000	Project partially worked out, left so that it can be taken up without delay when necessity arises.
6	E	—do—	Neruvi project	—	Plans & estimates under revision by Ex. Engineer.
7	D	Coimbatore	Bhavani Reservoir	—	Project partially worked out, left so that it can be taken up without delay when necessity arises.
8	G	Coimbatore	Poodamally Reservoir	—	Site examined and favourably reported on in 1878 - Nothing done.
9	G	Coimbatore	Allandally Reservoir	—	Proposed - Nothing done.
10	C	Bellary	Hindupur Reservoir	about 193,000	Plans & estimates prepared.
11	C	—do—	Rondalam Reservoir	about 174,000	—— do ——
12	B	Madura	Periyaur Project	6,44,463	Sanctioned by Secretary of State - allotment of funds awaited.

No	Reference	District	Name of work	Amount of Estimate Rs	Remarks
12	C	Cuddapah	Sugglair Project	about 7,03,400	Plans & Estimate prepared under supervision by Ex. Engineer.
13	G	Kurnool	Talangeharuvu / Byalla Tank / Tank restoration	about 29,1900	Preliminary report received Nothing since done
14	G	Cuddapah	Ancient work / Reservoir	—	Proposed. Nothing done
15	C	—do—	Peddapaculla / Chandrasagra	39,700	Plans and estimates prepared.
16	G	Kurnool	Venkatarazie / Pedlicia Tank / restoration	about 46,000	Preliminary report made in 1876 - Nothing since done.
17	G	—do—	Nerud Tank / Restoration	about 29,000	Nothing done.
18	G	—do—	Palavatla / Tank Project	50,000	Partially investigated in 1871 - Nothing since done.
19	G	—do—	Devalapur Project	"	Partially investigated in 1877 Nothing since done.
20	G	—do—	Tackur Reservoir	"	—— Do —— Do ——
21	E	—do—	Banaganapally / Reservoir	"	Partially investigated by the S.D.C. & Nundoor C.
22	G	—do—	Near Tank / Tank Project	"	Proposed. Nothing done
23	G	—do—	Pedlacherla Tank	"	—— Do —— Do ——
24	G	—do—	Tank sites in / Markapur Taluq	"	—— Do —— Do ——
25	G	Bellary	Bookacherla / Project	3,95,040	Estimate to be returned to Supdg Engr in 1877 - Nothing since done

No	Reference	District	Name of work	Amount of Estimate Rs	Remarks
26	G	Bellary	Potalacunta / Tank Project	about 16,000	Partially investigated from 1877. Nothing since done.
27	G	—do—	Pyleapore / Muggy Reservoir	"	—— do —— do ——
28	E	Gurjam	Mulla / Tangeda / Project	39,700	Estimate to be revised by the Executive Engineer.
29	C	Bellary	Upper Bellary / Project	"	Plans & sections to of modified Project nearly ready for submission
30	A	Nath Arcot	Pochan Ancut / Conjeveram / Project	19,93,893	Estimate & sanction and work in progress.
31	E	Tinnevelly	Papanassam / Reservoir	"	Site inspected by the Supt Engr for Irrigation and project abandoned.
32	E	Trichinopoly	Veagur Channel Project	28,210	Project ordered to be abandoned by Government.
33	E	—do—	Kodamthorai / Tank Project	15,000	Estimate to be prepared & under consideration by Supdg Engr
34	C	South Arcot & Tanjore	Lower Coleroon / Ancut Project	"	Surveys & Estimate to complete with the ordinary Establishments
35	C	Combatore	Bogathur Channel	1,07,300	Abandoned in favor of return of Cauvery Channel - Plans & Estimate for which have been Completed & will be submitted shortly.
36	G	Cuddapah	Nakamal pond / Channel to / Project	"	Nothing done since 1879

No.	Refer Sheet	District	Name of work	Amount of Estimate Rs	Remarks
37	G	South Arcot	Attur Project	"	Nothing done since 1873.
38	G	N. Arcot	Palayair River	"	—— Do —— Do ——
39	G	— Do —	Pullagacherry Channel Project	"	—— Do —— Do ——
40	G	Nellore	Restoring Adura pillai Tank	15,000	Suggested in 1869 - Nothing done since.
41	G	— Do —	Restoring Tenmanelapady Tank	24,000	—— Do —— Do ——
42	G	— Do —	Restoring Gundalakamma Tank	1,00,000	—— Do —— Do ——
43	G	Chingleput	Improving Irrigation from under Narmanaram River	3,00,000	Partially surveyed in 1869 - Nothing done since.
44	F	— Do —	Channel from Tank at Tamaraipakam	"	Under consideration of Engineer.
45	D	Godavari	Irrigation Works Project	"	Further investigation left to Godavari Delta Workers Complete
46	G	Nellore	Gundicotta Reservoir	"	Proposed - Nothing done
47	E	Kurnool	Giant Kistna Reservoir	"	—— Do —— Do ——
48	E	Madras	Tank in Kalivoth Kannur Valley	12,000	Abandoned - Irrigation Project having been condemned.
49	E	— do —	Poondi Reservoir	15,05,056	—— Do —— Do ——
50	E	— do —	Cullafurnam Reservoir	67,000	—— Do —— Do ——
51	E	— do —	Reservoir near Pallagoondoo	"	—— Do —— Do ——

Madras Colonel, R.E.
Chief Engineer for Irrigation

Works in contemplation that might be available as Famine Relief Works.

19/1877-78

No.	District	Name of work	Amount of Estimate Rs	Remarks.
1	Kurnool	Kurnool Canal Diversion at Jangadancha -	60,000	Estimates prepared - work could be marked out at once.
2	— Do —	Kurnool Canal Distributaries	4,00,000	Plans & estimates under preparation - Some are understood to be ready.
3	Ganjam	Ganjam - Gopalpore Canal	4,57,145	Estimates sanctioned by the Secretary of State - work not to be commenced till Rushkulia is further drawn.
4	Godavari	Boat Canal from Dumagudem to Bundarlanka	4,55,300	Estimate prepared - under revision by Superintending Engineer.
5	South Canara	West Coast Canals.		Estimates for 65 miles being prepared by Engineer.
6	Cuddapah	Abigair Extension	47,750	Estimates prepared and awaiting for allotment of funds.
7	Godavari	Kamalkotta Tuni Canal		Project partially surveyed by Mr. Project Division, survey & estimate necessary.
8	Tanjore	Improvements		Subject to be under consideration by Chief Engineer.

Madras Col. R.E.
Chief Engineer for Irrigation

No. 1377 W

Laid before Irrigation

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 8th June 1882

READ the following

Note by the Chief Engineer for Irrigation } R.C. No. 57 dtd 9-7-82.

Ordered to be forwarded for the information of the Govt. of India, with reference to this Department Order No. 466 W dtd 13th June 1882.

2 The remarks on the Conservancy of the Chief Engineer not relative to the enforcement of the Forest Laws, will be communicated to the Conservator of Forests.

Chief Engineer for Irrigation
Chief Engineer
Chief Secretary
Secretary
Revenue Secretary

R.C. No. 57 dtd 9-7-82

Forwarded

Secretary
4/8/82

20-7-82

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1877-78

Govt. of India
PUBLIC WORKS