(1) Number of pages 124

(2) Date of repair 11-87

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# TAMIL NADU ARCHIVES

## GOVERNMENT OF TAMIL NADU

P.W. DEPARTMENT

G.O. No. / B.P. No. 3032 W — Press. / Mis.

Dated 16.12.1885 — 198 .

*Not to be folded or roughly handled*

Archives 1--10,006 1-88.

Order—dated 16th December 1885, No. 3032 W., Public Works.

This report, which is very satisfactory, will be communicated to the Chief Engineer for Irrigation; also to the Marine Department for information and consideration with reference to paragraph 4.

2. The Superintending Engineer will submit an application in proper form for an increase of pay to Mr. Gaetane.

(True Extract.)

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

To the Chief Engineer for Irrigation.
" Marine Department.
" Superintending Engineer, I Circle.

Exd. E. Fernandez.
Spare Copies

GENERAL.
ACCOUNT.

Govt. of {1885} Madras

PUBLIC WORKS.

*Dated December, 16th.*

*Encl.*

*Read.*

G.O., 16th Dec. 1885, No. 3032 W.

DECEMBER.

**Priestman's Dredgers and Portable Engine**

Orders on notes of inspection of the Superintending Engineer, I Circle, on —.

3032/3

FINAL I

**PRODUCTIVE PUBLIC WORKS, IRRIGATION AND NAVIGATION.** **MADRAS PRESIDENCY.**

PUBLIC WORKS DEPARTMENT.

# IMPERIAL BUDGET ESTIMATE

FOR

# PRODUCTIVE PUBLIC WORKS, IRRIGATION AND NAVIGATION,

IN THE

# MADRAS PRESIDENCY,

FOR THE YEAR

# 1884-85.

29th April 1884.

(Signed) J. O. HASTED, Colonel, R.E.,
Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

3032/4

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# GOVERNMENT OF MADRAS.

BUDGET ESTIMATE OF THE IMPERIAL REVENUE FROM IRRIGATION WORKS IN THE MADRAS PRESIDENCY FOR THE YEAR FROM THE 1ST APRIL 1884 TO 31ST MARCH 1885.

| — | Budget Estimate, 1884-85. | Revised Estimate, 1883-84. | Budget Estimate, 1883-84. | Actual Realisations, 1882-83. |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| **G. REVENUE FROM PRODUCTIVE PUBLIC WORKS.—REVENUE ACCOUNT.** | Rs. | Rs. | Rs. | Rs. |
| XXVII. IRRIGATION AND NAVIGATION—DIRECT RECEIPTS. | | | | |
| Imperial. | | | | |
| Godávari Delta System ... ... ... ... ... ... ... | 70,000 | 82,500 | 91,050 | 76,747 |
| Kistna Delta System ... ... ... ... ... ... ... | 50,200 | 49,800 | 36,380 | 49,727 |
| Pennér Anicut System ... ... ... ... ... ... ... | 200 | 260 | 400 | 157 |
| Cauvery Delta System ... ... ... ... ... ... ... | 8,000 | 8,000 | 9,100 | 8,303 |
| Srivaikuntham Anicut System ... ... ... ... ... ... | 2,000 | 2,000 | 1,100 | 1,854 |
| Kurnool-Cuddapah Canal ... ... ... ... ... ... | 10,000 | 5,000 | 5,000 | 76,023 |
| Total ... | 1,40,400 | 1,47,560 | 1,43,230 | 2,12,901 |





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# GOVERNMENT OF MADRAS.

BUDGET ESTIMATE OF THE PORTION OF LAND REVENUE DUE TO IRRIGATION UNDER PRODUCTIVE PUBLIC WORKS.

| — | Budget Estimate 1884-85. | Revised Estimate, 1883-84. | Budget Estimate, 1883-84. | Actual Realisations, 1882-83. |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| **G. REVENUE FROM PRODUCTIVE PUBLIC WORKS.—REVENUE ACCOUNT.** | Rs. | Rs. | Rs. | Rs. |
| XXVIII. PORTION OF LAND REVENUE DUE TO IRRIGATION. | | | | |
| Imperial. | | | | |
| Godávari Delta— | | | | |
| Irrigation Revenue ... ... ... ... ... ... | 16,70,000 | 16,20,000 | 17,22,000 | 15,56,401 |
| Deduct Revenue due to old Irrigation ... ... ... ... | 1,30,000 | 1,30,000 | 1,30,000 | 1,25,184 |
| Revenue due to the System ... ... ... ... ... | 14,90,000 | 14,90,000 | 15,92,000 | 14,31,217 |
| Share of enhanced Land Revenue ... ... ... ... | 1,50,000 | 1,50,000 | 1,60,000 | 1,51,165 |
| Total ... | 16,40,000 | 16,40,000 | 17,52,000 | 15,82,382 |
| Deduct Collection Charges in the Civil Department at 7·2 per cent. on Revenue ... ... ... ... ... ... | 1,18,080 | 1,18,080 | 1,26,144 | 1,13,931 |
| Net Revenue ... | 15,21,920 | 15,21,920 | 16,25,856 | 14,68,451 |
| Kistna Delta System— | | | | |
| Irrigation Revenue ... ... ... ... ... ... | 9,00,000 | 9,00,000 | 9,75,000 | 8,29,896 |
| Deduct Revenue due to old Irrigation ... ... ... ... | 76,000 | 76,000 | 75,000 | 75,102 |
| Revenue due to the System ... ... ... ... ... | 8,24,000 | 8,24,000 | 8,99,000 | 7,54,794 |
| Share of enhanced Land Revenue ... ... ... ... | 1,30,000 | 1,30,000 | 1,30,000 | 1,26,247 |
| Total ... | 9,54,000 | 9,54,000 | 10,29,000 | 8,81,041 |
| Deduct Collection Charges in the Civil Department at 7·2 per cent. on Revenue ... ... ... ... ... ... | 68,688 | 68,688 | 74,088 | 63,435 |
| Net Revenue ... | 8,85,312 | 8,85,312 | 9,54,912 | 8,17,606 |
| Pennér Anicut— | | | | |
| Irrigation Revenue ... ... ... ... ... ... | 2,30,000 | 2,30,000 | 2,30,000 | 2,34,957 |
| Deduct Revenue due to old Irrigation ... ... ... ... | 1,20,000 | 1,20,000 | 1,13,000 | 1,20,350 |
| Revenue due to the System ... ... ... ... ... | 1,10,000 | 1,10,000 | 1,17,000 | 1,14,607 |
| Share of enhanced Land Revenue ... ... ... ... | 15,000 | 15,000 | 15,500 | 15,210 |
| Total ... | 1,25,000 | 1,25,000 | 1,32,500 | 1,29,817 |
| Deduct Collection Charges in the Civil Department at 7·2 per cent. on Revenue ... ... ... ... ... ... | 9,000 | 9,000 | 9,540 | 9,347 |
| Net Revenue ... | 1,16,000 | 1,16,000 | 1,22,960 | 1,20,470 |
| Cauvery Delta— | | | | |
| Irrigation Revenue ... ... ... ... ... ... | 29,00,000 | 29,00,000 | 31,08,000 | 29,04,846 |
| Deduct Revenue due to old Irrigation ... ... ... ... | 23,40,000 | 23,40,000 | 23,25,000 | 23,43,214 |
| Revenue due to the System ... ... ... ... ... | 5,60,000 | 5,60,000 | 7,83,000 | 5,61,632 |
| Share of enhanced Land Revenue ... ... ... ... | 1,36,000 | 1,36,000 | 1,36,000 | 1,36,508 |
| Total ... | 6,96,000 | 6,96,000 | 9,19,000 | 6,98,140 |
| Deduct Collection Charges in the Civil Department at 7·2 per cent. on Revenue ... ... ... ... ... ... | 50,112 | 50,112 | 66,168 | 50,266 |
| Net Revenue ... | 6,45,888 | 6,45,888 | 8,52,832 | 6,47,874 |

# GOVERNMENT OF MADRAS.

BUDGET ESTIMATE OF THE PORTION OF LAND REVENUE DUE TO IRRIGATION UNDER PRODUCTIVE PUBLIC WORKS—*continued.*

| — | Budget Estimate, 1884-85. | Revised Estimate, 1883-84. | Budget Estimate, 1883-84. | Actual Realisations, 1882-83. |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| **G. REVENUE FROM PRODUCTIVE PUBLIC WORKS—REVENUE ACCOUNT—continued.** | Rs. | Rs. | Rs. | Rs. |
| XXVIII. PORTION OF LAND REVENUE DUE TO IRRIGATION—continued. | | | | |
| Imperial—continued. | | | | |
| Srivaikuntham Anicut— | | | | |
| Irrigation Revenue ... ... ... ... ... ... | 1,70,000 | 1,70,000 | 1,70,000 | 1,71,741 |
| Deduct Revenue due to old Irrigation ... ... ... ... | 78,000 | 78,000 | 97,500 | 77,642 |
| Revenue due to the System ... ... ... ... | 92,000 | 92,000 | 72,500 | 94,099 |
| Share of enhanced Land Revenue ... ... ... ... | 2,000 | 2,000 | 2,000 | 2,248 |
| Deduct Collection Charges in the Civil Department at 7·2 per cent. on Revenue ... ... ... ... Total ... | 94,000 | 94,000 | 74,500 | 96,347 |
| | 6,768 | 6,768 | 5,364 | 6,931 |
| Net Revenue ... | 87,232 | 87,232 | 69,136 | 89,416 |
| Kurnool-Cuddapah Canal— | | | | |
| Irrigation Revenue ... ... ... ... ... ... | 70,000 | 57,000 | 85,000 | ... |
| Deduct Collection Charges in the Civil Department at 7·2 per cent. on Revenue ... ... ... ... ... | 5,046 | 4,104 | 6,120 | ... |
| Net Revenue ... | 64,960 | 52,896 | 78,880 | ... |
| Total— | | | | |
| Irrigation Revenue ... ... ... ... ... ... | 58,90,000 | 58,77,000 | 62,90,000 | 56,97,841 |
| Deduct Revenue due to old Irrigation ... ... ... ... | 27,44,000 | 27,44,000 | 27,41,500 | 27,41,492 |
| Revenue due to the System ... ... ... ... | 31,46,000 | 31,33,000 | 35,48,500 | 29,56,349 |
| Share of enhanced Land Revenue ... ... ... ... | 4,33,000 | 4,33,000 | 4,43,500 | 4,31,378 |
| Deduct Collection Charges in the Civil Department at 7·2 per cent. on Revenue ... ... ... ... Total ... | 35,79,000 | 35,66,000 | 39,92,000 | 33,87,727 |
| | 2,57,688 | 2,56,752 | 2,87,424 | 2,43,916 |
| Net Revenue ... | 33,21,312 | 33,09,248 | 37,04,576 | 31,43,811 |





# GOVERNMENT OF MADRAS.

ABSTRACT BUDGET ESTIMATE OF THE CHARGES ON IRRIGATION WORKS IN THE MADRAS PRESIDENCY FROM 1ST APRIL 1884 TO 31ST MARCH 1885.

| — | Reference to Detailed Estimates. | Budget Estimate, 1884-85. | Revised Estimate, 1883-84. | Budget Estimate, 1883-84. | Actual Outlay, 1882-83. |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT.** | Page. | Rs. | Rs. | Rs. | Rs. |
| 51. IRRIGATION AND NAVIGATION. | | | | | |
| Imperial. | | | | | |
| I.—Works ... ... ... ... ... ... | 8 to 12 | 16,06,162 | 12,12,226 | 11,81,693 | 7,49,287 |
| II.—Establishment ... ... ... ... ... | 22 | 3,34,718 | 2,50,383 | 2,50,621 | 1,64,510 |
| III.—Tools and Plant ... ... ... ... ... | 23 | 43,120 | 1,54,744 | 67,686 | 78,237 |
| Less Receipts on Capital Account ... ... ... | | ... | ... | ... | — 1,088 |
| Total ... | | 19,84,000 | 16,27,353 | 15,00,000 | 9,90,946 |
| Kurnool Canal (purchase money) ... ... ... | | ... | 1,28,000 | 1,60,000 | 1,76,25,819 |
| Total ... | | 19,84,000 | 17,55,353 | 16,60,000 | 1,86,16,765 |
| **G. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—REVENUE ACCOUNT.** | | | | | |
| 38. IRRIGATION AND NAVIGATION (WORKING EXPENSES). | | | | | |
| Imperial. | | | | | |
| I-A.—Extensions and Improvements ... ... ... | 13 & 14 | 1,16,564 | 1,07,734 | 1,08,620 | 65,465 |
| I-B.—Maintenance and Repairs ... ... ... | 15 to 20 | 4,17,298 | 4,12,881 | 5,22,000 | 3,44,604 |
| II.—Establishment ... ... ... ... ... | 22 | 3,26,483 | 3,22,478 | 2,68,674 | 3,08,442 |
| III.—Tools and Plant ... ... ... ... ... | 24 | ... | 59,316 | 47,145 | 58,085 |
| Additional Allotment provisionally allowed to stand pending further consideration ... ... | | ... | ... | 2,63,161 | ... |
| Refunds of Revenue ... ... ... | | ... | ... | ... | 7,513 |
| Total ... | | 9,20,590 | 9,02,409 | 12,09,600 | 7,84,110 |
| *Totals.* | | | | | |
| I.—Works including Extensions and Improvements | 8 to 14 | 17,22,726 | 13,19,960 | 12,90,313 | 8,14,752 |
| I-B.—Maintenance and Repairs ... ... ... | 15 to 20 | 4,17,298 | 4,12,881 | 5,22,000 | 3,44,604 |
| II.—Establishment ... ... ... ... ... | 22 | 6,61,206 | 5,82,861 | 5,19,295 | 4,72,952 |
| III.—Tools and Plant ... ... ... ... ... | 23 & 24 | 1,03,360 | 1,99,060 | 1,14,831 | 1,36,323 |
| Additional Allotment provisionally allowed to stand pending further consideration ... ... | | ... | ... | 2,63,161 | ... |
| Less Receipts on Capital Account ... ... ... | | ... | ... | ... | — 1,088 |
| Refunds of Revenue ... ... ... ... ... | | ... | ... | ... | 7,513 |
| Kurnool Canal (purchase money) ... ... ... | | ... | 1,28,000 | 1,60,000 | 1,76,25,050 |
| Total ... | | 29,04,590 | 26,42,762 | 28,69,600 | 1,94,00,106 |

# GOVERNMENT OF MADRAS.

## PART I.

BUDGET ESTIMATE OF EXPENDITURE ON IRRIGATION WORKS IN THE MADRAS PRESIDENCY FOR THE YEAR 1884-85, ARRANGED BY SYSTEMS.

| | Amount of Estimate. | Amount of Actual Outlay to end of 1882-83. | Revised Estimate, 1883-84. | Budget Estimate, 1883-84. | Budget Estimate, 1884-85. | Remarks and References. |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT.** | Rs. | Rs. | Rs. | Rs. | Rs. | |
| 51. IRRIGATION AND NAVIGATION. | | | | | | |
| Imperial. | | | | | | |
| *Works in Progress.* | | | | | | |
| Godávari Delta System ... | 1,10,88,695 | 92,39,974 | 3,[illegible],951 | 3,50,000 | 4,58,000 | Government of India Register No. 3 I. of 1882-83.—Proceedings of Madras Government, No. 514 I., of 4th July 1882, and No. 854 I., of 23rd October 1882. |
| Kistna Delta System ... | 1,38,99,784 | 68,74,768 | 4,43,131 | 4,50,000 | 5,25,000 | Government of India Register No. 14 I. of 1881-82.—Proceedings of Madras Government, No. 291 I., of 28th March 1882. |
| Sangam Anicut System ... | 28,96,437 | 7,57,154 | 5,93,470 | 4,64,000 | 6,08,000 | Government of India Register No. 4 I. of 1881-82.—Proceedings of Madras Government, No. 342 I., of 2nd June 1881. |
| Cauvery Delta System ... | 16,80,217 | 10,47,662 | [illegible],558 | 2,00,000 | 2,66,000 | Government of India Register No. 8 I. of 1883-84.—Proceedings of Madras Government, No. 775 I., dated 21st September 1883. |
| Srivaikuntham Anicut System | 13,61,520 | 12,38,078 | 54,240 | 36,000 | 41,500 | Government of India Register No. 10 I. of 1883-84.—Proceedings of Madras Government, No. 863 I., dated 3rd November 1883. |
| Kurnool-Cuddapah Canal ... | 1,77,53,819 | 1,76,25,819 | 1,28,000 | 1,60,000 | ... | Proceedings of Madras Government, No. 993 I., dated 5th December 1883. |
| Barur Tank Project ... ... | 3,20,000 | 1,00,070 | 11,003 | ... | 85,500 | Government of India Register No. 1 of 1883-84.—Proceedings of Madras Government, No. 714 I., dated 3rd September 1883. |
| Total ... | 4,90,00,472 | 3,58,83,523 | 17,55,353 | 16,60,000 | 19,84,000 | |
| **G. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—REVENUE ACCOUNT.** | | | | | | |
| 38. Irrigation and Navigation. | | | | | | |
| (Working Expenses.) | | | | | | |
| Imperial. | | | | | | |
| Godávari Delta System ... | ... | ... | 3,76,950 | 2,85,621 | 3,64,937 | |
| Kistna do. do. ... | ... | ... | 2,81,482 | 2,38,220 | 2,91,160 | |
| Pennér Anicut do. ... | ... | ... | 15,930 | 31,140 | 14,275 | |
| Cauvery Delta do. ... | ... | ... | 37,630 | 1,23,034 | 9,919 | |
| Srivaikuntham Anicut System | ... | ... | 8,681 | 22,798 | 19,997 | |
| Kurnool-Cuddapah Canal ... | ... | ... | 1,81,736 | 2,40,626 | 2,20,302 | |
| Additional allotment provisionally allowed to stand pending further consideration. | ... | ... | ... | 2,63,161 | ... | |
| Total ... | ... | ... | 12,400 | 12,09,600 | 9,20,590 | |
| Grand Total ... | ... | ... | 26,57,762 | 28,69,600 | 29,04,590 | |





# GOVERNMENT OF MADRAS.

## PART I—continued.

BUDGET ESTIMATE OF EXPENDITURE IN ENGLAND ON IRRIGATION WORKS IN THE MADRAS PRESIDENCY, FOR THE YEAR 1884-85, ARRANGED BY PROJECTS AND OBJECTS OF WORKS.

| | Budget Estimate, 1884-85. | | | | Revised Estimate, 1883-84. | Budget Estimate, 1883-84. | Actual Outlay, 1882-83. |
|---|---|---|---|---|---|---|---|
| | Works. | Tools and Plant. | Suspense Account. | Total. | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT.** | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| 51. Irrigation and Navigation. | | | | | | | |
| Imperial. | | | | | | | |
| Godávari Delta System ... ... ... ... | ... | ... | ... | ... | 5,000 | ... | ... |
| Kistna Delta System ... ... ... ... | ... | ... | ... | ... | 20,270 | ... | ... |
| Cauvery do. ... ... ... ... | ... | 4,000 | ... | 4,000 | 4,730 | ... | ... |
| Kurnool-Cuddapah Canal ... ... ... | ... | ... | ... | ... | 1,28,000 | 1,60,000 | 1,76,25,819 |
| Total ... | ... | 4,000 | ... | 4,000 | 1,58,000 | 1,60,000 | 1,76,25,819 |
| **G. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—REVENUE ACCOUNT.** | | | | | | | |
| 38. Irrigation and Navigation. | | | | | | | |
| Imperial. | | | | | | | |

# GOVERNMENT OF MADRAS.

## PART II.

DETAIL OF BUDGET ESTIMATE FOR WORKS FOR THE YEAR 1884-85.

| Division. | Item No. | Details. | Amount of Estimate. | A, B, or C Class. | Outlay. To end of 1882-83. | Outlay. Probable during 1883-84. | Grant, 1884-85. | Item No. | Remarks and References. |
|---|---|---|---|---|---|---|---|---|---|
| | | **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT.** | Rs. | | Rs. | Rs. | Rs. | | |
| | | **51. Irrigation and Navigation.** | | | | | | | |
| | | **Imperial.** | | | | | | | |
| | | **Godavari Delta System.** | | | | | | | |
| | | *Eastern Section.* | | | | | | | |
| Godávari Eastern Division. | 1 | Cocanada Canal | 2,19,481 | A. | 2,05,658 | 5,680 | 1,712 | 1 | Government of India Register No. 3 I. of 1882-83. G.O., No. 854 I., of 23rd October 1882. |
| | 2 | Sámalkót do. | 1,57,393 | A. | 1,40,758 | 6,277 | 4,218 | 2 | |
| | 3 | Bank do. | 3,08,511 | A. | 2,32,342 | 43,620 | 14,163 | 3 | |
| | 4 | Mundapetta do. | 58,852 | A. | 48,776 | 3,470 | 6,600 | 4 | |
| | 5 | Coringa do. | 77,917 | A. | 62,235 | 2,863 | 8,626 | 5 | |
| | 6 | Injerum do. | 42,378 | A. | 28,130 | 840 | 5,740 | 6 | |
| | 7 | Tooliabhaga Drain | 1,47,988 | A. | 1,19,790 | 4,090 | 16,500 | 7 | |
| | 8 | Biccavole do. | 72,307 | A. | 55,544 | 1,000 | 6,900 | 8 | |
| | 9 | Taki do. | 2,44,875 | A. | 1,89,231 | 1,886 | 20,541 | 9 | |
| | | Total, Eastern Section | ... | | ... | ... | 85,000 | | |
| | | *Central Section.* | | | | | | | |
| Godávari Central Division. | 10 | Head Works | 16,300 | A. | | 8,180 | 5,500 | 10 | |
| | 11 | Main Canal | 40,870 | A. | 263 | 3,220 | 5,000 | 11 | |
| | 12 | Gunnaram Canal | 3,11,440 | A. | 37,031 | 53,780 | 68,000 | 12 | |
| | 13 | Bank do. | 1,69,970 | A. | 4,816 | 15,310 | 12,140 | 13 | Government of India Register No. 3 I. of 1882-83. G.O., No. 854 I., of 23rd October 1882. |
| | 14 | Amalápuram do. | 1,63,480 | A. | ... | 15,000 | 42,500 | 14 | |
| | 15 | Bendamurlunka Canal | 66,070 | A. | ... | ... | 14,260 | 15 | |
| | 16 | Drainages | 1,03,733 | A. | 3,968 | 32,250 | 32,600 | 16 | |
| | | Total, Central Section | ... | | ... | ... | 1,80,000 | | |
| | | *Western Section.* | | | | | | | |
| Godávari Western Division. | 17 | Main Canal | 54,590 | A. | 52,989 | 1,050 | 100 | 17 | |
| | 18 | Kakaraparru Canal | 59,112 | A. | 52,884 | 4,000 | 100 | 18 | |
| | 19 | Gostanadi and Velpur Canal | 2,18,860 | A. | 1,27,653 | 30,750 | 32,342 | 19 | |
| | 20 | Bank Canal | 1,50,974 | A. | 1,31,636 | 5,200 | 9,750 | 20 | |
| | 21 | Narsápur do. | 2,18,224 | A. | 2,11,442 | 3,500 | 2,350 | 21 | |
| | 22 | Ellore do. | 2,80,096 | A. | 2,65,912 | 2,700 | 5,562 | 22 | |
| | 23 | Attili do. | 81,891 | A. | 78,890 | 500 | 1,650 | 23 | |
| | 24 | Junction do. | 75,428 | A. | 73,825 | 750 | 800 | 24 | Government of India Register No. 3 I. of 1882-83. G.O., No. 854 I., of 23rd October 1882. |
| | 25 | Venkiah and Weyeru Canal | 29,439 | A. | 8,531 | 3,500 | 7,410 | 25 | |
| | 26 | Undi Canal | 1,44,230 | A. | 95,590 | 5,000 | 16,950 | 26 | |
| | 27 | Nakkala Drain | 22,700 | A. | ... | 9,200 | 12,830 | 27 | |
| | 28 | Yenamaduru do. | 27,725 | A. | 24,053 | 500 | 3,140 | 28 | |
| | 29 | Gontair do. | 24,500 | A. | 18,218 | 400 | 4,700 | 29 | |
| | 30 | Buggeswaram do. | 16,300 | A. | 6,491 | 9,040 | 650 | 30 | |
| | 31 | Caza do. | 10,886 | A. | 10,686 | 30 | 50 | 31 | |
| | 32 | Rudrayakodu do. | 3,500 | A. | ... | 300 | 2,700 | 32 | |
| | 33 | Minor drains | 11,613 | A. | 2,413 | 530 | 3,946 | 33 | |
| | | Total, Western Section | ... | | ... | ... | 1,05,000 | | |
| | | Total, Godávari Delta System | ... | | ... | ... | 3,70,000 | | |
| | | **Kistna Delta System.** | | | | | | | |
| | | *Eastern Section.* | | | | | | | |
| Kistna Eastern Division. | 34 | Ryves' Canal | 5,76,951 | A. | 3,88,589 | 35,910 | 12,000 | 34 | |
| | 35 | Head Works | 1,31,685 | A. | ... | 2,435 | 9,000 | 35 | G.O., No. 799 I. of 9th October 1882. |
| | 36 | Masulipatam Canal | 2,43,520 | A. | ... | 2,068 | 20,000 | 36 | G.O., No. 181 I., dated 28th February 1883. |
| | 37 | Ellore do. | 2,46,930 | A. | 11,347 | 30,515 | 36,000 | 37 | |
| | 38 | Bank Canal and its drainages | 10,71,836 | A. | 4,837 | 2,000 | 7,000 | 38 | |

GOVERNMENT OF MADRAS.

PART II—continued.

DETAIL OF BUDGET ESTIMATE FOR WORKS FOR THE YEAR 1884-85—*continued.*

| Division. | Item No. | Details. | Amount of Estimate. | A, B, or C Class. | Outlay. To end of 1882-83. | Outlay. Probable during 1883-84. | Grant, 1884-85. | Item No. | Remarks and References. |
|---|---|---|---|---|---|---|---|---|---|
| | | **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT—continued.** | Rs. | | Rs. | Rs. | Rs. | | |
| | | 51. Irrigation and Navigation—continued. | | | | | | | |
| | | IMPERIAL—*continued.* | | | | | | | |
| | | Kistna Delta System—continued. | | | | | | | |
| | | *Eastern Section*—cont. | | | | | | | |
| Kistna Eastern Division—*cont.* | 39 | Uppulluru Drain ... ... ... ... ... ... | 28,725 | A. | ... | 510 | 6,950 | 39 | G.O., No. 272 I., of 29th March 1883. |
| | 40 | Lazzabanda drain and its affluents ... ... ... | 2,19,034 | A. | ... | 3,500 | 18,050 | 40 | G.O., No. 179 I., of 26th February 1883. |
| | | Total, Eastern Division ... | ... | | ... | ... | 1,09,000 | | |
| Gudivâda Division ... | 41 | Pulleru Canal ... | ... | | ... | 10,492 | 35,460 | 41 | |
| | 42 | Polraz do. ... ... ... ... ... ... | 3,14,050 | A. | 7,719 | 56,472 | 29,780 | 42 | |
| | 43 | Ryves' do. ... ... ... ... ... ... | 2,98,504 | A. | ... | 656 | 8,400 | 43 | * *Vide* Budget Item No. 34. |
| | 44 | Bantumilli Canal ... ... ... ... ... ... | * | A. | 50 | 5,149 | 11,800 | 44 | |
| | 45 | Polraz Drain ... ... ... ... ... ... | 1,49,062 | A. | ... | 13,518 | 14,500 | 45 | |
| | 46 | Chendrayacodu Drain ... ... ... ... ... ... | 1,87,130 | A. | 163 | 12,192 | 11,770 | 46 | Government of India Register No. 14 I. of 1881-82. P.M.G., No. 291 I., of 28th March 1882. |
| | 47 | Pullava Main Drain and its affluents ... ... ... | 1,43,402 | A. | ... | 2,100 | 3,200 | 47 | |
| | 48 | Dammidi Drain ... ... ... ... ... ... | 21,345 | A. | ... | ... | 1,000 | 48 | |
| | 49 | Peddacommeleru Drain and its affluents ... ... ... | 41,141 | A. | ... | ... | 6,000 | 49 | |
| | 50 | Feddalanka Drain ... ... ... ... ... ... | 89,223 | A. | ... | 120 | 4,080 | 50 | |
| | | Total, Gudivâda Division ... | ... | | ... | ... | 1,26,000 | | |
| | | *Western Section.* | | | | | | | |
| Kistna Western Division. | 51 | Main Canal ... ... ... ... ... ... | 5,38,020 | A. | 92,419 | 39,200 | 44,000 | 51 | |
| | 52 | Commamur Canal ... ... ... ... ... ... | 10,11,717 | A. | 3,77,280 | 43,937 | 45,500 | 52 | |
| | 53 | Bank Canal ... ... ... ... ... ... | 4,10,362 | A. | 2,505 | 23,210 | 33,000 | 53 | Government of India Register No. 14 I. of 1881-82. P.M.G., No. 291 I., of 28th March 1882. |
| | 54 | Repalle Drain ... ... ... ... ... ... | 2,43,792 | A. | 9,992 | 28,525 | 40,000 | 54 | |
| | 55 | Tungabhadra Drain ... ... ... ... ... ... | 6,15,191 | A. | ... | 80 | 12,000 | 55 | |
| | 56 | Komperu Drain ... ... ... ... ... ... | 1,84,100 | A. | ... | ... | 10,000 | 56 | |
| | | Total, Western Division ... | ... | | ... | ... | 1,84,500 | | |
| | | Total, Kistna Delta System ... | ... | | ... | ... | 4,19,500 | | |
| | | *Sangam Anicut Project.* | | | | | | | |
| Sangam Division ... | 57 | Head Works ... ... ... ... ... ... | 4,55,518 | A. | 2,77,457 | 1,35,000 | 1,06,940 | 57 | |
| | 58 | Kanigiri Canal ... ... ... ... ... ... | 818,944 | A. | 2,78,828 | 2,11,[illegible] | 1,85,100 | 58 | |
| | 59 | Duvur do. ... ... ... ... ... ... | 11,005 | A. | 1,445 | 2,900 | 5,930 | 59 | |
| | 60 | Eastern Channel ... ... ... ... ... ... | 3,14,070 | A. | 10,743 | 65,000 | 42,000 | 60 | |
| | 61 | Yellayapallem Branch Channel ... ... ... ... | 15,400 | A. | ... | 1,000 | 9,250 | 61 | Government of India Register No. 4 I. of 1881-82. P.M.G., No. 352 I., of 2nd June 1881. |
| | 62 | Allur Channel ... ... ... ... ... ... | 26,510 | A. | ... | ... | 15,540 | 62 | |
| | 63 | Allur Branch Channel ... ... ... ... ... ... | 30,000 | A. | ... | 1,500 | 17,950 | 63 | |
| | 64 | Southern Channel ... ... ... ... ... ... | 2,83,690 | A. | 5,062 | 9,500 | 81,800 | 64 | |
| | 65 | Central do. ... ... ... ... ... ... | 52,700 | A. | 62 | 7,500 | 35,490 | 65 | |
| | | Total, Sangam Anicut System ... | ... | | ... | ... | 5,00,000 | | |
| | | *Barur Tank Project.* | | | | | | | |
| Salem ... ... | 66 | Nedungal Anicut ... ... ... ... ... ... | 18,035 | A. | ... | ... | 18,000 | 66 | |
| | 67 | Agaram Channel ... ... ... ... ... ... | 10,655 | A. | ... | ... | 5,000 | 67 | Government of India Register No. 1. of 1883-84. P.M.G., No. 714 I., dated 3rd September 1883. |
| | 68 | Barur Tank and supply channel ... ... ... | 2,08,178 | A. | 80,357 | 8,000 | 46,000 | 68 | |
| | | Total, Barur Tank Project ... | ... | | ... | ... | 69,000 | | |
| | | *Cauvery Delta System.* | | | | | | | |
| Cauvery and Vennár Regulators Division. | 69 | Head Works ... ... ... ... ... ... | 78,585 | A. | 10 | 7,700 | 43,300 | 69 | |
| | 70 | Cauvery Improvements ... ... ... ... ... ... | 1,59,640 | A. | 14,484 | 52,018 | 60,000 | 70 | Government of India Register No. 8 I. of 1883-84. P.M.G., No. 778, of 21st September 1883. |
| | 71 | Vennár do. ... ... ... ... ... ... | 2,28,325 | A. | ... | 25,500 | 1,08,700 | 71 | |
| | | Total, Cauvery Delta System ... | ... | | ... | ... | 2,12,000 | | |

DETAIL OF BUDGET ESTIMATE FOR WORKS FOR THE YEAR 1884-85—*continued.*

| Division. | Item No. | Details. | Amount of Estimate. | A, B, or C Class. | Outlay. To end of 1882-83. | Outlay. Probable during 1883-84. | Grant, 1884-85. | Item No. | Remarks and References. |
|---|---|---|---|---|---|---|---|---|---|
| | | **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT—continued.** | Rs. | | Rs. | Rs. | Rs. | | |
| | | 51. Irrigation and Navigation—continued. | | | | | | | |
| | | IMPERIAL—*continued.* | | | | | | | |
| | | *Srivaikuntham Anicut System.* | | | | | | | |
| Tinnevelly Division. | 72 | North Main Channel ... ... ... ... ... | 5,15,939 | | 4,44,465 | 30,023 | 28,545 | 72 | Government of India Register No. 10 I. of 1883-84. P. M. G., No. 863 I., of 3rd November 1883. |
| | 73 | South do. ... ... ... ... ... | 3,02,962 | | 2,77,012 | 17,533 | 7,117 | 73 | |
| | | Total, Srivaikuntham Anicut System ... | ... | | ... | ... | 35,662 | | |
| | | Total ... | ... | | ... | ... | 16,06,162 | | |
| | | **G. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—REVENUE ACCOUNT.** | | | | | | | |
| | | 38. Irrigation and Navigation (Working Expenses). | | | | | | | |
| | | IMPERIAL. | | | | | | | |
| | | Extensions and Improvements. | | | | | | | |
| Godávari Eastern Delta. | 74 | Godávari Delta System, Minor Extensions and Improvements. | ... | | ... | 8,000 | 8,000 | 74 | |
| Do. Central do. | 75 | Do. do. do. ... | ... | | ... | 4,000 | 5,000 | 75 | |
| Do. Western do. | 76 | Do. do. do. ... | ... | | ... | 6,000 | 7,000 | 76 | |
| Kistna Eastern do. | 77 | Kistna Delta System do. do. ... | ... | | ... | 5,100 | 4,500 | 77 | |
| Gudiváda Division ... | 78 | Do. do. do. do. ... | ... | | ... | 1,400 | 2,500 | 78 | |
| Kistna Western Delta. | 79 | Do do. do. do. ... | ... | | ... | 3,850 | 4,000 | 79 | |
| Nellore ... ... | 80 | Pennér Anicut System ... ... ... ... ... | ... | | ... | 5,500 | 7,000 | 80 | |
| | | Deduct old maintenance charges ... | ... | | | 3,[illegible] | 3,564 | | |
| | | Net grant ... | ... | | | 1,936 | 3,436 | | |
| Kurnool Division ... | 81 | Kurnool-Cuddapah Canal ... ... ... ... | ... | | ... | 34,119 | 55,000 | 81 | |
| Negapatam Division ... | 82 | Cauvery Delta System, Pandavyar Yadiar Dam and Yariangudi Channel, Head-sluice Improvements. | 6,830 | | ... | 4,000 | 2,830 | 82 | P. M. G., No. 910 I., of 9th November 1882. |
| Do. ... | 83 | Do. Pamanyam—Sharangolam Dam screw shutters to the ... ... ... ... ... ... | 6,650 | | ... | 3,000 | 3,650 | 83 | P. M. G., No. 441 I., of 4th June 1883. |
| Do. ... | 84 | Cauvery Delta System, Minor Extensions and Improvements. | ... | | ... | 17,000 | 15,000 | 84 | |
| Tanjore Division ... | 85 | Do. do. do. ... | ... | | ... | 2,500 | 4,000 | 85 | |
| Tinnevelly do. ... | 86 | Srivaikuntham Anicut System do. ... | ... | | ... | 1,760 | 2,000 | 86 | |
| | | Deduct old maintenance charges ... | ... | | ... | 352 | 352 | | |
| | | Net grant ... | ... | | ... | 1,408 | 1,648 | | |
| | | Total ... | ... | | ... | ... | 1,16,564 | | |

# GOVERNMENT OF MADRAS.

## PART II—continued.

GENERAL ABSTRACT OF THE GRANT PROVIDED IN THE PRECEDING ESTIMATE.

| | Imperial Funds. | | | Contributions. | Local Funds. | Total. |
|---|---|---|---|---|---|---|
| | In India. | In England. | Total. | | | |
| **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT.** | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| 51. Irrigation and Navigation. | | | | | | |
| Godávari Delta System ... ... ... | 3,70,000 | ... | 3,70,000 | ... | ... | 3,70,000 |
| Kistna Delta System ... ... ... | 4,19,500 | ... | 4,19,500 | ... | ... | 4,19,500 |
| Sangam Anicut System ... ... ... | 5,00,000 | ... | 5,00,000 | ... | ... | 5,00,000 |
| Cauvery Delta System ... ... ... | 2,12,000 | ... | 2,12,000 | ... | ... | 2,12,000 |
| Srivaikuntham Anicut System ... ... | 35,662 | ... | 35,662 | ... | ... | 35,662 |
| Barur Tank Project ... ... ... | 69,000 | ... | 69,000 | ... | ... | 69,000 |
| Total ... | 16,06,162 | ... | 16,06,162 | ... | ... | 16,06,162 |
| **G. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—REVENUE ACCOUNT.** | | | | | | |
| 38. Irrigation and Navigation (Working Expenses). | | | | | | |
| Imperial. | | | | | | |
| *Extensions and Improvements.* | | | | | | |
| Godávari Delta System ... ... ... | 20,000 | ... | 20,000 | ... | ... | 20,000 |
| Kistna Delta System ... ... ... | 11,000 | ... | 11,000 | ... | ... | 11,000 |
| Pennér Anicut System ... ... ... | 3,436 | ... | 3,436 | ... | ... | 3,436 |
| Kurnool Canal ... ... ... ... | 55,000 | ... | 55,000 | ... | ... | 55,000 |
| Cauvery Delta System ... ... ... | 25,480 | ... | 25,480 | ... | ... | 25,480 |
| Srivaikuntham Anicut System ... ... | 1,648 | ... | 1,648 | ... | ... | 1,648 |
| Total ... | 1,16,564 | ... | 1,16,564 | ... | ... | 1,16,564 |





# GOVERNMENT OF MADRAS.

2032/II

## PART III.

DETAIL OF THE BUDGET ESTIMATE OF MAINTENANCE AND REPAIRS OF IRRIGATION WORKS FOR THE YEAR 1884-85.

| | Estimate, 1884-85. | | Estimate, 1883-84. | |
|---|---|---|---|---|
| | Amount. | Total. | Amount. | Total. |
| **G. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—REVENUE ACCOUNT.** | Rs. | Rs. | Rs. | Rs. |
| 38.—IRRIGATION AND NAVIGATION. | | | | |
| (Working Expenses.) | | | | |
| Imperial. | | | | |
| Godávari Delta System— | | | | |
| Eastern Section— | | | | |
| Head Works ... ... ... ... ... ... ... | 27,000 | | 21,000 | |
| Main Canal ... ... ... ... ... ... | 5,000 | | 1,000 | |
| Bank do. ... ... ... ... ... ... | 6,000 | | 3,000 | |
| Cocanada do. ... ... ... ... ... ... | 8,000 | | 5,500 | |
| Sámalkót do. ... ... ... ... ... ... | 6,000 | | 3,500 | |
| Mundapetta do. ... ... ... ... ... ... | 5,000 | | 2,750 | |
| Coringa do. ... ... ... ... ... ... | 5,000 | | 2,500 | |
| Injeram do. ... ... ... ... ... ... | 2,000 | | 1,250 | |
| Tooliabhaga Drain, 31 miles ... ... ... | 2,000 | | 1,200 | |
| Takee Drain, 27 ,, ... ... ... ... | 2,000 | 70,000 | ... | 43,000 |
| Central Section— | | | | |
| Main Canal ... ... ... ... ... ... | 2,000 | | 2,000 | |
| Gunnaram do. ... ... ... ... ... ... | 8,000 | | 8,000 | |
| Bank do. ... ... ... ... ... ... | 5,000 | | 5,000 | |
| Amalápuram do. ... ... ... ... ... ... | 6,000 | | 6,000 | |
| Bendamurlanka do. ... ... ... ... ... ... | 3,000 | | 3,000 | |
| Kunavaram Drain ... ... ... ... ... ... | 1,000 | | 1,000 | |
| Rangarazu Kodu affluent, 7 miles ... ... ... | 1,500 | | 1,500 | |
| Inapuram affluent, 8 ,, ... ... ... ... | 1,000 | | 1,000 | |
| Upper Kowsika drain, 17 miles ... ... ... ... | 1,000 | | 1,000 | |
| Lower do. 22 ,, ... ... ... ... | 1,500 | 30,000 | 1,500 | 30,000 |
| Western Section— | | | | |
| Head Works ... ... ... ... ... ... | 1,000 | | 400 | |
| Main Canal ... ... ... ... ... ... | 4,000 | | 2,500 | |
| Kakarapur Canal ... ... ... ... ... ... | 1,000 | | 2,500 | |
| Gostanadi and Velpur Canal ... ... ... ... | 5,000 | | 4,000 | |
| Bank Canal ... ... ... ... ... ... | 4,000 | | 4,000 | |
| Narsápur do. ... ... ... ... ... ... | 8,000 | | 14,000 | |
| Ellore do. ... ... ... ... ... ... | 12,000 | | 20,000 | |
| Attili do. ... ... ... ... ... ... | 5,000 | | 7,000 | |
| Junction do. ... ... ... ... ... ... | 500 | | 1,000 | |
| Venkiah and Weyeru Canal ... ... ... ... | 6,000 | | 8,000 | |
| Undi Canal ... ... ... ... ... ... | 11,000 | | 5,000 | |
| Nakkala Drain, 25 miles ... ... ... ... | 700 | | 500 | |
| Kaza do. 16 ,, ... ... ... ... | 2,000 | | 200 | |
| Mogultur do. ... ... ... ... ... ... | 700 | | 1,000 | |
| Gonter do. ... ... ... ... ... ... | 600 | | 500 | |
| Gostanadi do. ... ... ... ... ... ... | 500 | | ... | |
| Yannamadurru Drain, 32 miles ... ... ... ... | 5,000 | | 4,400 | |
| Gunupudi Drain ... ... ... ... ... ... | 1,000 | | ... | |
| Bondapad do. ... ... ... ... ... ... | 300 | | ... | |
| Pandicodu do. ... ... ... ... ... ... | 500 | | 1,000 | |
| Tokalapalli do. 9 miles ... ... ... ... ... | 1,000 | | 1,000 | |
| Ambarpett do. ... ... ... ... ... ... | | | | |
| Bheemadole do. ... ... ... ... ... ... | | | | |
| Gundugole do. ... ... ... ... ... ... | | | | |
| Kovali do. ... ... ... ... ... ... | | | | |
| Dendulur do. ... ... ... ... ... ... | 2,000 | | 2,000 | |

# GOVERNMENT OF MADRAS.

**PART III**—continued.

DETAIL OF THE BUDGET ESTIMATE OF MAINTENANCE AND REPAIRS OF IRRIGATION WORKS FOR THE YEAR 1884-85—*continued.*

| | Estimate, 1884-85. | | Estimate, 1883-84. | |
|---|---|---|---|---|
| | Amount. | Total. | Amount. | Total. |
| **G. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—REVENUE ACCOUNT**—continued. | Rs. | Rs. | Rs. | Rs. |
| 38.—IRRIGATION AND NAVIGATION—continued. | | | | |
| **(Working Expenses)**—continued. | | | | |
| **Imperial**—cont. | | | | |
| Godávari Delta System—*cont.* | | | | |
| Western Section—*cont.* | | | | |
| Kykaram Drain ... | 200 | | 1,000 | |
| Mendicodu do. ... | 500 | | ... | |
| Old Dyeru ... ... | 50 | | ... | |
| Buvvanapalli Drain ... | 100 | | ... | |
| China Kaparam do. ... | 2,000 | | ... | |
| Bondada do. ... | 200 | | ... | |
| Rudrayakodu do. ... | 50 | | ... | |
| Mallavakodu do. ... | | | | |
| Siddlapuram drain ... | | | | |
| Total, Godávari Delta System ... | ... | 75,000 | ... | 80,000 |
| Kistna Delta System— | | | | |
| Eastern Section— | | | | |
| Kistna Eastern Division— | | | | |
| Head Works | | | | |
| Main Canal ... | 15,000 | | 29,000 | |
| Ellore do. ... | 12,800 | | | |
| Masulipatam do. ... | 14,000 | | 12,000 | |
| Bank do. ... | 21,000 | | 14,500 | |
| Ryves' do. ... | 200 | | ... | |
| Pullern do. ... | 5,000 | | 5,500 | |
| Sivaganga Drain ... | 1,000 | | 1,500 | |
| | 1,000 | | | |
| Gudiváda Division— | | 70,000 | | 62,500 |
| Pulleru Canal | 8,000 | | 6,000 | |
| Ryves' do. ... | 4,500 | | 2,000 | |
| Ellore do. ... | 1,500 | | ... | |
| Bantumilli Canal ... | 2,500 | | 4,500 | |
| Polaraz do. ... | 500 | | 5,000 | |
| Pamarru Junction Canal ... | 500 | | 500 | |
| Chendrayacodu Drain ... | 500 | | 2,500 | |
| Komaravole do. ... | | | | |
| Western Section— | | 20,000 | | 20,500 |
| Kistna Western Division— | | | | |
| Main Canal ... | 25,000 | | 16,000 | |
| Bank do. ... | 10,000 | | 16,000 | |
| Commamur Canal ... | 20,000 | | 18,000 | |
| Nizampatam do. ... | 15,000 | | 13,000 | |
| | | 70,000 | | 63,000 |
| Total, Kistna Delta System ... | ... | 1,60,000 | ... | 1,46,000 |





# GOVERNMENT OF MADRAS.

**PART III**—continued.

DETAIL OF THE BUDGET ESTIMATE OF MAINTENANCE AND REPAIRS OF IRRIGATION WORKS FOR THE YEAR 1884-85—*continued.*

| | Estimate, 1884-85. | | Estimate, 1883-84. | |
|---|---|---|---|---|
| | Amount. | Total. | Amount. | Total. |
| **G. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—REVENUE ACCOUNT**—continued. | Rs. | Rs. | Rs. | Rs. |
| 38.—IRRIGATION AND NAVIGATION—continued. | | | | |
| **Working Expenses**—continued. | | | | |
| *Imperial*—continued. | | | | |
| Pennér Anicut System— | | | | |
| Head Works ... | 3,000 | | 1,000 | |
| Main Canal ... | 100 | | 200 | |
| Jaffer Sahib's Canal ... | 3,000 | | 4,000 | |
| Sarvapalle do. ... | 3,000 | | 4,800 | |
| Kristnapatam do. ... | 2,900 | | 5,000 | |
| Delta Tanks and Reservoirs ... | 4,000 | | ... | |
| Total ... | 16,000 | | 15,000 | |
| Deduct old maintenance charges ... | 13,860 | | 13,860 | |
| Total, Pennér Anicut System ... | ... | 2,140 | ... | 1,140 |
| Kurnool Canal— | | | | |
| Special Repairs— | | | | |
| Head Works ... | ... | | 11,000 | |
| Distributaries ... | ... | | 6,000 | |
| | | | | 17,000 |
| Ordinary Repairs— | | | | |
| Head Works ... | 7,000 | | 7,000 | |
| First Section ... | 9,000 | | 9,000 | |
| Second do. ... | 8,000 | | 8,000 | |
| Third do. ... | 6,000 | | 6,000 | |
| Fourth do. ... | 13,000 | | 13,000 | |
| Fifth do. ... | 7,000 | | 7,000 | |
| Sixth do. ... | 8,600 | | 8,600 | |
| Seventh do. ... | 9,300 | | 9,300 | |
| Eighth do. ... | 13,100 | | 13,100 | |
| Ninth do. ... | 13,000 | | 13,000 | |
| Tenth do. ... | 9,000 | | 9,000 | |
| Telegraph Maintenance ... | 1,000 | | 1,000 | |
| Distributaries ... | 12,000 | | 12,000 | |
| | | 1,16,000 | | 1,16,000 |
| Total, Kurnool Canal ... | ... | 1,16,000 | ... | 1,33,000 |
| Cauvery Delta System— | | | | |
| Cauvery and Vennar Regulator Division— | | | | |
| Grand Anicut ... | ... | | 500 | |
| | | | | 500 |
| Tanjore Division— | | | | |
| Cauvery ... | 4,600 | | 8,185 | |
| Kodumurti and Puthaur ... | 2,600 | | 500 | |
| Arasilliár ... | 1,200 | | 150 | |
| Trimulrajen ... | 2,200 | | 384 | |
| Mudicondanar ... | 1,200 | | 200 | |
| Nattar ... | 2,300 | | 150 | |
| Keerthemanar ... | ... | | 268 | |
| Veerasholen ... | 500 | | 780 | |
| Munjalaur ... | 1,500 | | 500 | |
| Vellapar ... | 500 | | ... | |
| Mahimalayar ... | ... | | 200 | |
| Vanjeaur ... | 300 | | 150 | |

# GOVERNMENT OF MADRAS.

## PART III—continued.

DETAIL OF THE BUDGET ESTIMATE OF MAINTENANCE AND REPAIRS OF IRRIGATION WORKS FOR THE YEAR 1884-85—*continued.*

| | Estimate, 1884-85. | | Estimate, 1883-84. | |
|---|---|---|---|---|
| | Amount. | Total. | Amount. | Total. |
| **G. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—REVENUE ACCOUNT**—continued. | Rs. | Rs. | Rs. | Rs. |
| 38.—IRRIGATION AND NAVIGATION—continued. | | | | |
| **Working Expenses**—continued. | | | | |
| *Imperial*—continued. | | | | |
| Cauvery Delta System—*continued.* | | | | |
| Tanjore Division—*continued.* | | | | |
| Noolaur ... ... ... ... ... ... | 200 | | 370 | |
| Vennar ... ... ... ... ... ... ... | 3,800 | | 5,728 | |
| Vettar ... ... ... ... ... ... ... | 1,700 | | 2,720 | |
| Chittar ... ... ... ... ... ... ... | ... | | 460 | |
| Coleroon ... ... ... ... ... ... ... | ... | | 750 | |
| Pandanvari ... ... ... ... ... ... ... | ... | | 290 | |
| Nundalar ... ... ... ... ... ... ... | 500 | | 541 | |
| Thencoraiar ... ... ... ... ... ... ... | ... | | 400 | |
| Vieramanar ... ... ... ... ... ... ... | 500 | | 200 | |
| Yediar Drainage ... ... ... ... ... ... | 100 | | 50 | |
| Konar Voikal ... ... ... ... ... ... ... | 500 | | ... | |
| Narimaniar ... ... ... ... ... ... ... | 1,200 | | ... | |
| Thiruvali Tank ... ... ... ... ... ... ... | ... | | 100 | |
| Mottiar ... ... ... ... ... ... ... | 500 | | ... | |
| Petharasanar ... ... ... ... ... ... ... | 300 | | ... | |
| Pravadianar ... ... ... ... ... ... ... | ... | | 33 | |
| Pudumaniar ... ... ... ... ... ... ... | ... | | 400 | |
| Narasingamperar ... ... ... ... ... ... | ... | | 220 | |
| Ooppanaur ... ... ... ... ... ... ... | 300 | | 3,496 | |
| Vadakoraiyar ... ... ... ... ... ... ... | ... | | 200 | |
| Vadavaur ... ... ... ... ... ... ... | 1,200 | | ... | |
| Yeranianaur ... ... ... ... ... ... ... | ... | | 100 | |
| Puthaur ... ... ... ... ... ... ... | 500 | | ... | |
| Iyavianar ... ... ... ... ... ... ... | ... | | 100 | |
| Munneyar ... ... ... ... ... ... ... | 400 | | 260 | |
| Parayen Voikal ... ... ... ... ... ... | ... | | 500 | |
| Shollanar ... ... ... ... ... ... ... | 1,000 | | 740 | |
| Tank supply by Vadavaur ... ... ... ... ... | ... | | 75 | |
| | 600 | | 400 | |
| Negapatam Division— | 1,000 | | ... | |
| Vennar | | 30,000 | | 26,500 |
| Koriaur ... ... ... ... ... ... ... | 650 | | 4,481 | |
| Pamanyaur ... ... ... ... ... ... ... | 950 | | 4,645 | |
| Oiling screw gearing to the above head works ... ... | 610 | | ... | |
| Pandaviaur ... ... ... ... ... ... ... | 90 | | ... | |
| Vellayaur ... ... ... ... ... ... ... | 650 | | 2,735 | |
| Permeniaur ... ... ... ... ... ... ... | 800 | | 1,013 | |
| Panayanaur ... ... ... ... ... ... ... | ... | | 2,305 | |
| Nattu Varigal ... ... ... ... ... ... ... | ... | | 485 | |
| Keelthanggaur ... ... ... ... ... ... ... | ... | | -70 | |
| Mylleyaur ... ... ... ... ... ... ... | ... | | 380 | |
| Harichandranadi ... ... ... ... ... ... ... | 900 | | 2,560 | |
| Chittar ... ... ... ... ... ... ... | 1,000 | | 1,275 | |
| Iyanaur ... ... ... ... ... ... ... | ... | | 300 | |
| Autheveraramanaur ... ... ... ... ... ... | 150 | | 110 | |
| Vettar ... ... ... ... ... ... ... | 120 | | 110 | |
| Odumboghiaur ... ... ... ... ... ... ... | 390 | | 355 | |
| Vennar Samanthan Cauvery ... ... ... ... ... | 480 | | 2,015 | |
| Do. Kondiar ... ... ... ... ... ... | 480 | | ... | |
| Do. Chittar ... ... ... ... ... ... | 496 | | ... | |
| Koriaur Penoocondanaur ... ... ... ... ... | 200 | | ... | |
| Do. Palampandiar ... ... ... ... ... ... | 100 | | ... | |
| Do. Pudupandiar ... ... ... ... ... ... | 100 | | ... | |
| | 100 | | ... | |





# GOVERNMENT OF MADRAS.

## PART III—continued.

DETAIL OF THE BUDGET ESTIMATE OF MAINTENANCE AND REPAIRS OF IRRIGATION WORKS FOR THE YEAR 1884-85—*continued.*

| | Estimate, 1884-85. | | Estimate, 1883-84. | |
|---|---|---|---|---|
| | Amount. | Total. | Amount. | Total. |
| **G. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—REVENUE ACCOUNT**—continued. | Rs. | Rs. | Rs. | Rs. |
| 38.—IRRIGATION AND NAVIGATION—continued. | | | | |
| **Working Expenses**—continued. | | | | |
| *Imperial*—continued. | | | | |
| Cauvery Delta System—*continued.* | | | | |
| Negapatam Division—*continued.* | | | | |
| Koriaur Saloovanaur ... ... ... ... ... | 100 | | ... | |
| Do. Keelanthanghyaur ... ... ... ... ... | 100 | | ... | |
| Harichandranadi Paloovanaur ... ... ... ... | 400 | | ... | |
| Do. Nallaur ... ... ... ... ... | 100 | | ... | |
| Do. Ambothyar ... ... ... ... ... | 100 | | ... | |
| Mullyaur Adappaur ... ... ... ... ... | 500 | | ... | |
| Do Marakal Karayaur ... ... ... ... | 200 | | 590 | |
| Pandavyaur Chittar ... ... ... ... ... | 200 | | ... | |
| Do. Pitchakalyar ... ... ... ... ... | 150 | | ... | |
| Do. Yediar ... ... ... ... ... ... | 300 | | ... | |
| Vellayaur Annamarasanar ... ... ... ... ... | 495 | | ... | |
| Ragunatha Cauvery ... ... ... ... ... ... | ... | | 335 | |
| Nattoo Voikal ... ... ... ... ... ... | 100 | | ... | |
| Pullavanaur ... ... ... ... ... ... | 300 | | ... | |
| Seeravattanaur ... ... ... ... ... ... | 100 | | ... | |
| Nattaur ... ... ... ... ... ... ... | ... | | 380 | |
| Kavery Kondanaur ... ... ... ... ... ... | 100 | | ... | |
| Chundranady ... ... ... ... ... ... ... | 200 | | ... | |
| Sholavathyar ... ... ... ... ... ... ... | 100 | | ... | |
| Attuveeramanar Chittar ... ... ... ... ... | 100 | | ... | |
| Vettar Odemboghyar Kaduvyar ... ... ... ... | ... | | ... | |
| Volavoikal ... ... ... ... ... ... ... | 400 | | ... | |
| Devanadyar ... ... ... ... ... ... ... | 250 | | ... | |
| Sukkanar ... ... ... ... ... ... ... | 100 | | ... | |
| Therkodyar ... ... ... ... ... ... ... | 100 | | ... | |
| Kuthirysavaganar ... ... ... ... ... ... | 100 | | ... | |
| Mungalamalagianar ... ... ... ... ... ... | 100 | | ... | |
| Pamanyar Agamalanar ... ... ... ... ... | 250 | | ... | |
| Do. Thirumanyar ... ... ... ... ... | 500 | | ... | |
| Unforeseen Works ... ... ... ... ... ... | 4,289 | | 5,856 | |
| Special Repairs— | | | | |
| Adappaur ... ... ... ... ... ... ... | 2,000 | | ... | |
| Kaduvyar ... ... ... ... ... ... ... | 2,000 | | ... | |
| Marakakarayar ... ... ... ... ... ... ... | 3,000 | | ... | |
| Seeravattanar ... ... ... ... ... ... ... | 1,000 | | ... | |
| Valavanar ... ... ... ... ... ... ... | 2,000 | | ... | |
| Yadiar ... ... ... ... ... ... ... | 2,000 | | ... | |
| | | 30,000 | | 30,000 |
| Total, Cauvery Delta System ... | ... | 60,000 | ... | 60,000 |
| Deduct old maintenance charges ... | ... | 1,05,634 | ... | 1,05,634 |
| Net Cauvery Delta System ... | ... | — 45,634 | ... | — 45,634 |
| Srivaikuntham Anicut System— | | | | |
| Head Works ... ... ... ... ... ... ... | 3,320 | | 3,320 | |
| Supply channel ... ... ... ... ... ... | 2,000 | | 2,000 | |
| Tanks fed by the above channel ... ... ... ... | 3,400 | | 3,400 | |
| North Main channel ... ... ... ... ... | 2,000 | | 2,000 | |
| Tanks fed by the above channel ... ... ... ... | 3,027 | | 3,027 | |
| Tuticorin fresh water channel ... ... ... ... | 1,153 | | 1,153 | |
| | | 15,000 | | 15,000 |
| Deduct old maintenance charges ... | ... | 5,208 | .. | 5,208 |
| Net Srivaikuntham Anicut System ... | ... | 9,792 | ... | 9,792 |

# GOVERNMENT OF MADRAS.

## PART III—continued.

GENERAL ABSTRACT OF THE GRANTS PROVIDED FOR IN THE PRECEDING ESTIMATE.

| | Imperial Funds. | | | Contributions. | Local Funds. | Total. |
|---|---|---|---|---|---|---|
| | In India. | In England. | Total. | | | |
| **G. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—REVENUE ACCOUNT.** | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| 38.—IRRIGATION AND NAVIGATION. | | | | | | |
| **Working Expenses.** | | | | | | |
| *Imperial.* | | | | | | |
| Godávari Delta System ... ... ... | 1,75,000 | ... | 1,75,000 | ... | ... | 1,75,000 |
| Kistna do. do. ... ... ... | 1,60,000 | ... | 1,60,000 | ... | ... | 1,60,000 |
| Pennér Anicut do. ... ... ... | 2,140 | ... | 2,140 | ... | ... | 2,140 |
| Kurnool Canal ... ... ... ... | 1,16,000 | ... | 1,16,000 | ... | ... | 1,16,000 |
| Cauvery Delta System ... ... ... | — 45,634 | ... | — 45,634 | ... | ... | — 45,634 |
| Srivaikuntham Anicut System ... ... | 9,792 | ... | 9,792 | ... | ... | 9,792 |
| Total ... | 4,17,298 | ... | 4,17,298 | ... | ... | 4,17,298 |





# GOVERNMENT OF MADRAS.

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## PART IV.

DETAIL OF THE BUDGET ESTIMATE OF ESTABLISHMENT OF THE IRRIGATION BRANCH OF THE MADRAS PRESIDENCY FOR THE YEAR 1884-85.

| | Revised Estimate for 1883-84. | Budget Estimate for 1884-85. |
|---|---|---|
| | Rs. | Rs. |
| Grant for Works and Repairs ... ... ... ... ... ... | 17,32,841 | 21,40,024 |
| *Deduct items on which no charge for Establishment is admissible.* | | |
| Land compensation ... ... ... ... ... ... ... | 83,095 | 1,50,865 |
| Grant for adjustment of the cost of investigating the Barur Tank Project originally charged to Protective Works ... ... ... | 35 | ... |
| Total, Deductions ... | 83,130 | 1,50,865 |
| Net Grant ... | 16,49,711 | 19,89,159 |
| A. 23 per cent. on the Net Grant .. ... ... ... ... | 3,97,431 | 4,57,506 |
| Direct Revenue ... ... ... ... ... ... ... | 1,47,560 | 1,49,400 |
| B. 10 per cent. on Direct Revenue ... ... .. ... ... | 14,756 | 14,940 |
| Indirect Revenue exclusive of the share of enhanced Land Revenue ... ... ... ... ... ... ... ... | 31,33,000 | 31,46,000 |
| C. 6 per cent. on Indirect Revenue ... ... ... ... ... | 1,87,980 | 1,88,760 |
| D. Cost of Establishment employed in investigating the Barur Tank Project ... ... ... ... ... ... ... | 694 | ... |
| Total A + B + C + D ... | 5,82,861 | 6,61,206 |

# GOVERNMENT OF MADRAS.

## PART V.

DETAIL OF ESTIMATED CHARGES FOR ESTABLISHMENT BY SYSTEMS OF CANALS FOR THE YEAR 1884-85.

| — | Establishment Charges. | | | | | | |
|---|---|---|---|---|---|---|---|
| | 23 per Cent. on the Grant for Works and Repairs, exclusive of Land Compensation. | | 10 per Cent. on Direct Revenue. | | 6 per Cent. on Indirect Revenue. | | Total. |
| | Grant. | Per-centage. | Estimated Revenue. | Per-centage. | Estimated Revenue. | Per-centage. | |
| **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT.** | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| **51. IRRIGATION AND NAVIGATION.** | | | | | | | |
| Imperial. | | | | | | | |
| Godávari Delta System ... ... | 3,49,984 | 80,496 | ... | ... | ... | ... | 80,496 |
| Kistna do. do. ... .. | 3,93,097 | 90,412 | ... | ... | ... | ... | 90,412 |
| Sangam Anicut System ... ... | 4,20,000 | 96,600 | ... | ... | ... | ... | 96,600 |
| Cauvery Delta System ... ... | 1,99,000 | 45,770 | ... | ... | ... | ... | 45,770 |
| Srivaikuntham Anicut System ... | 24,216 | 5,570 | ... | ... | ... | ... | 5,570 |
| Barur Project ... ... ... ... | 69,000 | 15,870 | ... | ... | ... | ... | 15,870 |
| Total ... | 14,55,297 | 3,34,718 | ... | ... | ... | ... | 3,34,718 |
| **G. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—REVENUE ACCOUNT.** | | | | | | | |
| **38. IRRIGATION AND NAVIGATION.** | | | | | | | |
| Imperial. | | | | | | | |
| Godávari Delta System ... ... | 1,95,000 | 44,850 | 79,000 | 7,900 | 14,90,000 | 89,400 | 1,42,150 |
| Kistna do. do. ... ... | 1,71,000 | 39,330 | 50,200 | 5,020 | 8,24,000 | 49,440 | 93,790 |
| Pennér Anicut System ... ... | 5,576 | 1,282 | 200 | 20 | 1,10,000 | 6,600 | 7,902 |
| Kurnool-Cuddapah Canal ... ... | 1,71,000 | 39,330 | 10,000 | 1,000 | 70,000 | [illegible] | [illegible] |
| Cauvery Delta System ... ... | — 20,154 | — 4,635 | 8,000 | 800 | 5,60,000 | 33,600 | 29,765 |
| Srivaikuntham Anicut System ... | 11,440 | 2,631 | 2,000 | 200 | 92,000 | 5,520 | 8,351 |
| Total ... | 5,33,862 | 1,22,788 | 1,49,400 | 14,940 | 31,46,000 | 1,88,760 | 3,26,488 |
| Grand Total ... | 19,89,159 | 4,57,506 | 1,49,400 | 14,940 | 31,46,000 | 1,88,760 | 6,61,206 |





# GOVERNMENT OF MADRAS.

3652/19

## PART VI.

DETAIL OF THE BUDGET ESTIMATE FOR EXPENDITURE ON TOOLS AND PLANT FOR THE YEAR 1884-85.

| — | Budget Estimate, 1884-85. | Budget Estimate, 1883-84. |
|---|---|---|
| **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT.** | Rs. | Rs. |
| **51. IRRIGATION AND NAVIGATION.** | | |
| Imperial. | | |
| **Godavari Delta System.** | | |
| 9. Navigation Plant— | | |
| Eastern Division ... ... ... ... ... ... ... .. | ... | 3,000 |
| Pumps and Machinery for baling water ... ... ... ... .. | 2,000 | 3,200 |
| Central Division ... ... ... ... ... ... ... .. | 1,000 | 3,800 |
| Western Division, Ferry boat ... ... ... ... .. ... ... | 3,000 | 3,000 |
| 12. Miscellaneous— | | |
| Eastern Division ... ... ... ... ... ... ... ... | 504 | 500 |
| Central do. ... ... ... ... ... ... ... ... | 1,000 | 1,000 |
| Western do. ... ... ... ... ... ... ... ... | ... | 500 |
| Total ... | 7,504 | 15,000 |
| Expenditure in England ... | ... | 3,200 |
| Do. in India ... | 7,504 | 11,800 |
| Total, Godávari Delta System ... | 7,504 | 15,000 |
| **Kistna Delta System.** | | |
| *Eastern Section.* | | |
| 12. Miscellaneous— | | |
| Floating Plant—Ten Archimedean Screws ... ... ... ... ... | ... | 2,400 |
| Do. Pumps and English Stores ... ... ... ... ... | ... | 14,300 |
| Do. Six Composite Punts ... ... ... ... ... ... | 15,088 | 14,640 |
| Total ... | 15,088 | 31,340 |
| Expenditure in England ... | ... | 14,300 |
| Do. in India ... | 15,088 | 17,040 |
| Total, Kistna Delta System ... | 15,088 | 31,340 |
| **Sangam Anicut System.** | | |
| Machinery (Expenditure in India) ... ... ... ... ... ... ... | 11,400 | 5,000 |
| Total, Sangam Anicut System ... | 11,400 | 5,000 |
| **Barur Project.** | | |
| Tools (Expenditure in India) ... ... ... ... ... ... | 630 | ... |
| **Cauvery Delta System.** | | |
| Enamelled iron gauges ... ... ... ... ... ... ... | 4,000 | ... |
| Tools ... ... ... ... ... ... ... ... ... ... ... | 4,230 | ... |
| Total ... | 8,230 | ... |
| Expenditure in England ... | 4,000 | ... |
| Do. in India ... | 4,230 | ... |
| Total, Cauvery Delta System ... | 8,230 | ... |
| **Srivaikuntham Anicut System.** | | |
| Tools (Expenditure in India) ... ... ... ... ... ... ... | 268 | ... |
| Total, Capital Account ... | 43,120 | 51,340 |

# GOVERNMENT OF MADRAS.

**PART VI**—continued.

DETAIL OF THE BUDGET ESTIMATE FOR EXPENDITURE ON TOOLS AND PLANT FOR THE YEAR 1884-85—*continued.*

| | Budget Estimate, 1884-85. | Budget Estimate, 1883-84. |
|---|---|---|
| **G. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—REVENUE ACCOUNT.** | Rs. | Rs. |
| **38. IRRIGATION AND NAVIGATION (WORKING EXPENSES).** | | |
| Imperial. | | |
| Godavari Delta System. | | |
| *Eastern Division.* | | |
| 9. Navigation Plant—Staff boats ... ... ... ... ... ... ... ... | 2,000 | 1,500 |
| 12. Miscellaneous—Tools ... ... ... ... ... ... ... ... | 500 | 300 |
| 13. Repairs and Carriage—Maintenance of Navigation plant including existing ferries ... ... ... ... ... ... ... | 14,000 | 15,000 |
| Do. do. Special repairs to do. ... ... ... ... ... | 3,787 | 5,000 |
| Do. do. License fees ... ... ... ... ... ... | 4,000 | 5,000 |
| Do. do. Machinery ... ... ... ... ... ... | 500 | 500 |
| Total ... | 24,787 | 27,300 |
| *Central Division.* | | |
| 13. Repairs and Carriage of Navigation Plant, &c. ... ... ... ... ... | 1,000 | 1,000 |
| *Western Division.* | | |
| 13. Repairs and Carriage—Repairs of ferry boats and replacement of worn out existing boats by new ones ... ... ... ... ... ... ... ... | 2,000 | 1,500 |
| Deduct probable estimate of decrease to Capital and Profit on account of the Dowlaishweram Workshop ... ... ... ... ... ... ... ... | 27,787 | 29,800 |
| Total, Godávari Delta System ... | ... | 11,500 |
| | 27,787 | 18,300 |
| Kistna Delta System. | | |
| 9. Navigation Plant— *Eastern Section.* | | |
| Steamer ... ... ... ... ... ... ... ... | 8,000 | ... |
| 13. Repairs and Carriage—Maintenance of floating plant ... ... ... ... | 10,611 | 8,855 |
| Do. do. Special repairs to do. ... ... ... ... | 4,000 | 4,645 |
| Do. do. License fees of Government floating plant ... ... ... | 2,500 | 1,500 |
| Total .. | 25,111 | 15,000 |
| 9. Navigation Plant— *Western Section.* | | |
| Ferry Ballacuts ... ... ... ... ... ... ... | 259 | ... |
| 13. Repairs and Carriages—Maintenance of ferry ballacuts ... ... ... ... | 400 | ... |
| Do. Tools ... ... ... ... ... ... ... | 600 | ... |
| Total ... | 1,259 | ... |
| Total, Kistna Delta System ... | 26,370 | 15,000 |
| Penner Anicut System. | | |
| 12. Miscellaneous— Four Archimedean screws ... ... ... ... ... ... | 797 | ... |
| Kurnool Canal. | | |
| 13. Repairs and Carriage— Special Repairs to floating plant ... ... ... ... ... | 4,572 | 4,386 |
| Cauvery Delta System. | | |
| 13. Repairs and Carriage—Tools ... ... ... ... ... ... ... | 308 | ... |
| Srivaikuntham Anicut System. | | |
| 13. Repairs and Carriage—Tools ... ... ... ... ... ... ... | 206 | ... |
| Total, Revenue Account ... | 60,249 | 37,686 |





# GOVERNMENT OF MADRAS.

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**PART VII.**

ABSTRACT OF THE INCREASE OR DECREASE IN THE SUSPENSE ACCOUNTS OF IRRIGATION WORKS IN THE MADRAS PRESIDENCY FOR THE YEAR 1884-85.

None.

All Suspense Accounts are treated as Provincial.

# GOVERNMENT OF MADRAS.

## APPENDIX A.

ACTUAL AND ESTIMATED CAPITAL ACCOUNT OF IRRIGATION WORKS IN THE MADRAS PRESIDENCY TO END OF THE YEAR 1884-85.

| | Direct Charges. | Indirect Charges. | | | | GRAND TOTAL. |
|---|---|---|---|---|---|---|
| | | Capitalization of Abatement of Land Revenue. | Loss by Exchange on Payments in England. | Leave and Pension Allowances. | Total. | |
| *Godávari Delta System.* | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| Total actual outlay to end of 1882-83 ... | 92,39,974 | 14,27,327 | ... | 0 | 17,80,267 | 110,20,241 |
| Probable outlay during 1883-84 ... | 3,91,951 | 29,787 | 833 | ,0 | 38,990 | 4,30,941 |
| Proposed outlay during 1884-85 ... | 4,58,000 | 25,020 | ... | ,269 | 36,289 | 4,94,289 |
| Total ... | 1,00,89,925 | 14,82,134 | 833 | 3,72,579 | 18,55,546 | 119,45,471 |
| *Kistna Delta System.* | | | | | | |
| Total actual outlay to end of 1882-83 ... | 58,74,768 | 2,22,819 | ... | 2,33,041 | 4,55,860 | 63,30,628 |
| Probable outlay during 1883-84 ... | 4,43,131 | 30,677 | 3,378 | 9,921 | 43,976 | 4,87,107 |
| Proposed outlay during 1884-85 ... | 5,25,000 | 33,004 | ... | 12,658 | 45,662 | 5,70,662 |
| Total ... | 68,42,899 | 2,86,500 | 3,378 | 2,55,620 | 5,45,498 | 73,88,397 |
| *Pennér Anicut System.* | | | | | | |
| Total actual outlay to end of 1882-83 ... | 14,28,862 | 1,77,098 | ... | 59,199 | 2,36,297 | 16,65,159 |
| Probable outlay during 1883-84 ... | 7,57,154 | 26,296 | ... | 18,623 | 44,919 | 8,02,073 |
| Proposed outlay during 1884-85 ... | 5,93,470 | 17,932 | ... | 14,189 | 32,121 | 6,25,591 |
| Total ... | 6,08,000 | 1,00,000 | ... | 13,524 | 1,13,524 | 7,21,524 |
| *Cauvery Delta System.* | 19,58,624 | 1,44,228 | ... | 46,336 | 1,90,564 | 21,49,188 |
| Total actual outlay to end of 1882-83 ... | 10,47,663 | 60,760 | ... | 41,815 | 1,02,575 | 11,50,238 |
| Probable outlay during 1883-84 ... | 1,33,558 | ... | 788 | 2,744 | 3,532 | 1,37,090 |
| Proposed outlay during 1884-85 ... | 2,66,000 | 16,250 | 666 | 6,408 | 23,324 | 2,89,324 |
| Total ... | 14,47,221 | 77,010 | 1,454 | 50,967 | 1,29,431 | 15,76,652 |
| *Srivaikuntham Anicut System.* | | | | | | |
| Total actual outlay to end of 1882-83 ... | 12,38,078 | 16,177 | ... | 57,880 | 74,057 | 13,12,135 |
| Probable outlay during 1883-84 ... | 54,240 | 25,471 | ... | 875 | 26,346 | 80,586 |
| Proposed outlay during 1884-85 ... | 41,500 | 14,308 | ... | 780 | 15,088 | 56,588 |
| Total ... | 13,33,818 | 55,956 | ... | 59,535 | 1,15,491 | 14,49,309 |
| *Kurnool Canal.* | | | | | | |
| Total actual outlay to end of 1882-83 ... | 1,76,25,819 | ... | ... | ... | ... | 1,76,25,819 |
| Probable outlay during 1883-84 ... | 1,28,000 | ... | ... | ... | ... | 1,28,000 |
| Proposed outlay during 1884-85 ... | ... | ... | ... | ... | ... | ... |
| Total ... | 1,77,53,819 | ... | ... | ... | ... | 177,53,819 |
| *Barur Tank Project.* | | | | | | |
| Total actual outlay to end of 1882-83 ... | 1,00,070 | 6,829 | ... | 2,163 | 8,992 | 1,09,07 |
| Probable outlay during 1883-84 ... | 11,003 | ... | ... | 355 | 355 | 4,3 |
| Proposed outlay during 1884-85 ... | 85,500 | ... | ... | 2,222 | 2,222 | 7,7 |
| Total ... | 1,96,573 | 6,829 | ... | 4,740 | 11,569 | 2,08,142 |





# GOVERNMENT OF MADRAS.

## APPENDIX B.

ACTUAL AND ESTIMATED REVENUE ACCOUNT OF IRRIGATION WORKS IN THE MADRAS PRESIDENCY TO END OF THE YEAR 1884-85.

| | Probable Receipts, 1884-85. | | | Probable Expenses during 1884-85 including Indirect Charges. | Balance, Surplus or Deficit for 1884-85. | Probable Net Surplus or Deficit for 1883-84. | Actual Net Surplus or Deficit to end of 1882-83. | Probable Net Surplus or Deficit to end of 1884-85. |
|---|---|---|---|---|---|---|---|---|
| | Direct Receipts. | Portion of Land Revenue due to Irrigation. | Total. | | | | | |
| | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| Godávari Delta System. | 79,000 | 15,21,920 | 16,00,920 | 3,84,838 | 12,16,082 | 12,07,327 | 238,30,805 | 262,54,214 |
| Kistna Delta System. | 50,200 | 8,85,312 | 9,35,512 | 3,04,291 | 6,31,221 | 6,40,604 | 103,73,435 | 116,45,260 |
| Pennér Anicut System. | 200 | 1,16,000 | 1,16,200 | 15,381 | 1,00,819 | 99,174 | 12,09,759 | 14,09,752 |
| Cauvery Delta System. | 8,000 | 6,45,888 | 6,53,888 | 14,086 | 6,39,802 | 6,11,397 | 140,28,384 | 152,79,583 |
| Srivaikuntham Anicut System. | 2,000 | 87,232 | 89,232 | 21,166 | 68,066 | 79,679 | 3,47,082 | 4,94,827 |
| Kurnool Canal ... | 10,000 | 64,960 | 74,960 | 2,26,536 | —1,51,576 | —1,28,929 | — 63,708 | — 3,44,213 |
| Total ... | 1,49,400 | 33,21,312 | 34,70,712 | 9,66,298 | 25,04,414 | 25,09,252 | 497,25,757 | 547,39,423 |

## APPENDIX C.

ACTUAL AND ESTIMATED INTEREST ACCOUNT OF THE SYSTEMS IN THE MADRAS PRESIDENCY TO END OF THE YEAR 1884-85.

| | Actual Charges for Interest to end of 1882-83. | Probable Charges for Interest for 1883-84. | Probable Charges for Interest for 1884-85. | Total to end of 1884-85. | Net Surplus or Deficit from Appendix B. | Surplus or Deficit after paying Interest to end of 1884-85. |
|---|---|---|---|---|---|---|
| | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| Godávari Delta System ... | 81,74,910 | 3,77,138 | 3,93,837 | 89,45,885 | 262,54,214 | 173,08,329 |
| Kistna do. do. ... | 48,19,225 | 2,43,854 | 2,63,217 | 53,26,296 | 116,45,260 | 63,18,964 |
| Pennér Anicut do. ... | 10,74,532 | 57,154 | 57,154 | 11,88,840 | 14,09,752 | 2,20,912 |
| Sangam do. do. ... | 25,418 | 42,155 | 66,184 | 1,33,757 | ... | —1,33,757 |
| Cauvery Delta do. ... | 11,60,217 | 44,578 | 52,569 | 12,57,364 | 152,79,583 | 140,22,219 |
| Srivaikuntham Anicut System. | 5,92,518 | 50,608 | 52,523 | 6,95,649 | 4,94,827 | —2,00,822 |
| Kurnool Canal ... ... | 3,52,501 | 7,07,562 | 7,10,122 | 17,70,185 | —3,44,213 | —21,14,398 |
| Barur Tank Project ... ... | ... | 4,223 | 6,153 | 10,376 | ... | — 10,376 |
| Total ... | 1,61,99,321 | 15,27,272 | 16,01,759 | 193,28,352 | 547,39,423 | 354,11,071 |

# GOVERNMENT OF MADRAS.

## APPENDIX E.

MEMORANDUM OF WATER AND NAVIGATION RATES IN FORCE IN CANALS OF THE SEVERAL IRRIGATION SYSTEMS IN THE MADRAS PRESIDENCY.

| | Per Acre Irrigated. | |
|---|---|---|
| | Flow. | Lift. |
| **WATER-RATES.** | Rs. A. P. | Rs. A. P. |
| **GODAVARI AND KISTNA DELTA SYSTEMS.** | | |
| Single wet crop ... ... ... ... ... ... ... ... ... | 4 0 0 | 3 0 0 |
| Second wet crop on irrigated lands ... ... ... ... ... ... ... ... ... | 4 0 0 | 3 0 0 |
| If compounded for two crops for a term not less than five years ... ... ... | 6 8 0 | 4 14 0 |
| Single dry crop ... ... ... ... ... ... ... ... ... | 2 0 0 | 1 8 0 |
| Second dry crop on irrigated land (if not compounded) ... ... ... ... | 2 0 0 | 1 8 0 |
| Sugar-cane, betel plantations and other garden produce remaining on the ground for the time of two crops. ... ... ... ... ... ... ... ... | 8 0 0 | 6 0 0 |
| Do. if compounded for not less than five years ... ... ... ... ... | 6 8 0 | 4 14 0 |
| Dry crop on land for which irrigation has never been supplied or, having been once supplied, has been since discontinued. ... ... ... ... ... | 2 0 0 | 1 8 0 |
| **KURNOOL CANAL.** | | |
| Single wet crop ... ... ... ... ... ... ... ... ... | 4 0 0 | 3 0 0 |
| Second wet crop on irrigated land ... ... ... ... ... ... ... ... ... | 3 0 0 | 2 4 0 |
| If compounded for two crops for a term of not less than five years ... ... ... | 6 0 0 | 4 8 0 |
| Sugar-cane, betel gardens and other garden produce remaining on the ground for the time of two crops ... ... ... ... ... ... ... ... ... | 1 0 0 | 0 12 0 |
| Single dry crop ... ... ... ... ... ... ... ... ... | 1 0 0 | 0 12 0 |
| Second dry crop on irrigated land (if not compounded) ... ... ... ... | 1 0 0 | 0 12 0 |
| Dry crop on land for which irrigation has never been supplied, or if supplied, discontinued. ... ... ... ... ... | 3 0 0 | 2 4 0 |
| Garden crops (Class 2 of Madras Irrigation and Canal Company's rules) ... ... | | |

*N.B.*—A reduction of the above rates at 50 per cent. for the first five years and 25 per cent. for the second five years will be made in the case of lands which have not been wet cultivated within the last ten years.

2. If blocks of 50 acres and upwards of unoccupied waste lands are taken up for irrigated cultivation, water will be supplied, without restriction as to crops, free of charge for five years, and at half rates for another five years.

Water-rates are not separately levied for other irrigation systems.

### Navigation Rates on the Godavari, Kistna, Buckingham and Kurnool Canals.

| | | Rs. | A. | P. |
|---|---|---|---|---|
| License Fees—Cargo Boats, per ton of 50 cubic feet ... ... ... ... ... | | 2 | 8 | 0 |
| Do. Passenger Boats, A Class do. do. do. ... ... ... ... ... | | 5 | 0 | 0 |
| Do. do. do. B do. do. do. ... ... ... ... ... | | 3 | 0 | 0 |
| Do. Budgerows C do. do. do. ... ... ... ... ... | | 5 | 0 | 0 |
| Do. do. do. D do. do. do. ... ... ... ... ... | | 3 | 0 | 0 |
| Do. Steamers, per ton ... ... ... ... ... ... ... ... ... | | 5 | 0 | 0 |
| Do. Private Boats not carrying goods or passengers per boat per annum ... | | 12 | 0 | 0 |
| Do. Pleasure Boats do. do. ... ... ... ... ... ... ... | | 1 | 0 | 0 |
| Tolls—Rafts, timber, per 100 square feet ... ... ... ... ... ... ... | | 0 | 8 | 0 |
| Do. do. bamboo, do. do. ... ... ... ... ... ... ... | | 0 | 4 | 0 |
| Do. Cargo and Passenger boats, per ton of 50 cubic feet for six weeks ... | | 0 | 8 | 0 |
| Do. Steamers do. ... ... ... ... ... ... ... | | 1 | 0 | 0 |
| Private boats not carrying goods or passengers, per boat ... ... ... | | 3 | 0 | 0 |





# GOVERNMENT OF MADRAS.

SCHEDULE A.—SHOWING THE COMPONENT WORKS OF THE BUDGET ITEMS FOR 1884-85—*cont.*

| Item No. | Main Head. | Name of Canal. | Sub-Head. | Individual Works. | Amount of Estimate. | Outlay. To end of 1882-83. | Outlay. Probable during 1883-84. | Grant, 1884-85. | Item Total. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT.** | | | | Rs. | Rs. | Rs. | Rs. | Rs. |
| | 51. Irrigation and Navigation. | | | | | | | | |
| | GODAVARI DELTA SYSTEM. | | | | | | | | |
| | *Eastern Section.* | | | | | | | | |
| 1 | (2.) Main Canals and Branches. | Cocanada Canal. | I. Navigation. | Quarters for Lock establishment. | 4,880 | 376 | 3000 | 1,504 | |
| | (3.) Distributaries. | Ditto ... | L. Earthwork. | Minor channels ... | 13,853 | 12,265 | 1,060 | 208 | |
| 2 | (2.) Main Canals and Branches. | Sámalkót Canal. | I. Navigation. | Quarters for Lock establishment. | 3,300 | 422 | 2,000 | 878 | 1,712 |
| | (3.) Distributaries. | Ditto ... | B. Land ... | Compensation for land. | 4,080 | 2,009 | 200 | 1,371 | |
| | | Ditto ... | C. Works. | Head sluice, &c. | 17,302 | 13,332 | ... | 1,969 | |
| 3 | (2.) Main Canals and Branches. | Bank Canal. | B. Land ... | Compensation for land. | 7,550 | 822 | 2,330 | 1,728 | 4,218 |
| | Ditto ... | Ditto ... | F. (1) Other Cross Drainage Works. | Under tunnel to Injaram drain. | 5,600 | 540 | 3,440 | 1,500 | |
| | | | ... | Minor drainage works in extension. | 3,000 | ... | ... | 3,000 | |
| | Ditto ... | Ditto ... | I. Navigation. | Quarters for Lock establishments (5 locks). | 4,300 | 175 | 2,000 | 2,125 | |
| | Ditto ... | Ditto ... | Ditto ... | Lock at Tallarevu | 27,800 | 6,500 | 20,000 | 1,300 | |
| | (3.) Distributaries. | Ditto ... | B. Land. | Compensation for land. | 18,000 | ... | ... | 800 | |
| | Ditto ... | Ditto ... | C. Works. | Head sluices ... | 11,310 | ... | 400 | 1,710 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Earthwork ... | 4,000 | ... | ... | 2,000 | 14,163 |
| 4 | (2.) Main Canals and Branches. | Mundapeta Canal. | I. Navigation. | Quarters for Lock establishment. | 2,080 | ... | 1,040 | 1,040 | |
| | (3.) Distributaries. | Ditto ... | B. Land ... | Compensation for land. | 3,290 | 1,434 | 100 | 566 | |
| | Ditto ... | Ditto ... | C. Works. | Head slaices, &c. | 10,784 | 4,239 | 1,500 | 3,894 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Minor channels ... | 8,396 | 7,296 | ... | 1,100 | 6,600 |
| 5 | (2.) Main Canals and Branches. | Coringa Canal. | F. (1) Other Cross Drainage Works. | Inlets ... ... | 1,300 | ... | ... | 1,300 | |
| | Ditto ... | Ditto ... | I. Navigation. | Quarters for Lock establishment. | 3,660 | ... | 1,220 | 2,440 | |
| | Ditto ... | Ditto ... | O. Miscellaneous. | Cattle crossings ... | 1,200 | ... | ... | 1,200 | |
| | Distributaries. | Ditto ... | C. Works. | Head sluices, &c. | 18,989 | 12,177 | 900 | 2,686 | |
| | ... | Ditto ... | L. Earthwork. | Earthworks ... | 7,731 | 5,976 | 93 | 1,000 | 8,626 |

# GOVERNMENT OF MADRAS.

SCHEDULE A.—SHOWING THE COMPONENT WORKS OF THE BUDGET ITEMS FOR 1884-85—*cont.*

| Item No. | Main Head. | Name of Canal. | Sub-Head. | Individual Works. | Amount of Estimate. | Outlay | | Grant, 1884-85. | Item Total. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | To end of 1882-83. | Probable during 1883-84. | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | | | **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT—continued.** | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | | | **51. Irrigation and Navigation—continued.** | | | | | |
| | | | | GODAVARI DELTA SYSTEM—*continued.* | | | | | |
| | | | | *Eastern Section*—continued. | | | | | |
| 6 | (2). Main Canals and Branches. | Injerum Canal. | I. Navigation. | Quarters for Lock establishment. | 1,040 | ... | ... | 1,040 | |
| | (3.) Distributaries. | Ditto .. | C. Works. | Head sluices, &c. | 8,670 | 2,321 | 800 | 2,500 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Earthwork ... | 8,318 | 4,618 | ... | 2,200 | 5,740 |
| 7 | (4.) Drainage and Protective Works. | Toolia Bhaga Drain. | B. Land... | Compensation for land. | 12,368 | 9,778 | 90 | 2,500 | |
| | Ditto ... | Ditto ... | C. Works. | Masonry works ... | 17,764 | 10,550 | 1,500 | 3,500 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Improvements ... | 1,18,504 | 99,462 | 2,500 | 10,500 | |
| 8 | Ditto ... | Biccavole Drain. | C. Works. | Masonry works ... | 9,170 | 5,967 | 1,000 | 1,400 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Improvements ... | 58,700 | 47,061 | ... | 5,500 | 6,900 |
| | Ditto ... | Taki Drain. | B. Land... | Compensation for land. | 12,897 | 5,103 | 386 | 5,541 | |
| | Ditto ... | Ditto ... | C. Works. | Masonry works ... | 15,089 | 7,489 | ... | 5,000 | |
| 9 | Ditto ... | Ditto ... | L. Earthwork. | Main and minor drains. | 2,16,289 | 1,76,639 | 1,500 | 10,000 | |
| | | | | TOTAL, EASTERN SECTION. | ... | ... | ... | ... | 20,541 |
| | | | | | | | | | 85,000 |
| | | | | *Central Section.* | | | | | |
| 10 | (1.) Head Works. | ... | K. Buildings. | Rest house at Razole on Gannaram Canal. | 2,500 | ... | ... | 2,500 | |
| 11 | (2.) Main Canals and Branches. | Main Canal. | C. Works. | Under-sluice improvements. | 6,300 | ... | 3,300 | 3,000 | |
| 12 | Ditto ... | Gannaram Canal. | L. Earthwork. | Improvements to Main Canal. | 39,000 | 263 | 1,450 | 5,000 | 5,500 |
| | Ditto ... | Ditto ... | B. Land... | Compensation for land. | 2,310 | ... | 500 | 1,000 | 5,000 |
| | Ditto ... | Ditto ... | F. R. and Hill Torrent Works. | Gannaram aqueduct improvements. | 21,700 | 3,995 | 7,700 | 5,000 | |
| | Ditto ... | Ditto ... | H. Escapes. | Rámachandrapuram surplus weir | 5,270 | ... | ... | 3,000 | |
| | Ditto ... | Ditto ... | Ditto .. | Bellampudi surplus weir. | 4,400 | 375 | 3,000 | 1,000 | |
| | Ditto ... | Ditto ... | I. Navigation. | Fender pile foot bridge at Rámachandrapuram | 390 | ... | ... | 390 | |
| | Ditto ... | Ditto ... | Ditto ... | surplus weir. Rámachandrapuram lock. | 18,160 | 712 | ... | 7,000 | |





# GOVERNMENT OF MADRAS.

SCHEDULE A.—SHOWING THE COMPONENT WORKS OF THE BUDGET ITEMS FOR 1884-85—*cont.*

| Item No. | Main Head. | Name of Canal. | Sub-Head. | Individual Works. | Amount of Estimate. | Outlay | | Grant, 1884-85. | Item Total. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | To end of 1882-83. | Probable during 1883-84. | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | | | **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT—continued.** | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | | | **51. Irrigation and Navigation—continued.** | | | | | |
| | | | | GODAVARI DELTA SYSTEM—*continued.* | | | | | |
| | | | | *Central Section*—continued. | | | | | |
| | (2) Main Canals and Branches. | Gannaram Canal. | I. Navigation. | Fender pile foot bridge at Bellampudi Luchswaram. | 350 | ... | ... | 350 | |
| | Ditto ... | Ditto ... | Ditto | Mondepulanka Lock. | 21,200 | ... | 9,000 | 12,000 | |
| | Ditto ... | Ditto ... | Ditto | Mondepulanka Lock weir. | 5,500 | ... | 4,000 | 2,500 | |
| | Ditto ... | Ditto ... | Ditto | Sivakondu Lock. | 19,660 | ... | ... | 7,000 | |
| | Ditto ... | Ditto ... | Ditto | Do. Lock weir. | 2,750 | ... | ... | 2,500 | |
| | Ditto ... | Ditto ... | Ditto | Quarters for Lock establishment. | 5,020 | ... | ... | 2,260 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Earthwork improvements to the canal. | 1,15,600 | 11,975 | 21,130 | 19,000 | |
| | (3) Distributaries. | Ditto ... | C. Works. | Masonry works. | 16,350 | ... | 1,600 | 3,000 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Improvements to various channels. | 5,000 | ... | ... | 2,000 | 68,000 |
| 13 | (2) Main Canals and Branches. | Bank Canal. | B. Land. | Compensation for land. | 900 | ... | 150 | 100 | |
| | Ditto ... | Ditto ... | F. R. and Hill Torrent Works. | Virdha Gowtami drain under tunnel. | 9,680 | ... | 6,000 | 3,680 | |
| | Ditto ... | Ditto ... | F. Other Cross Drainage Works. | Inlets ... ... | 5,010 | ... | 1,000 | 1,000 | |
| | Ditto ... | Ditto ... | I. Navigation. | Lolla Lock ... | 17,550 | 1,025 | 7,500 | 7,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Quarters for Lock establishment. | 2,940 | ... | ... | 360 | |
| 14 | Ditto ... | Amalapur Canal. | Ditto ... | Chintalapudi Lock | 18,250 | ... | ... | 7,000 | 12,140 |
| | Ditto ... | Ditto ... | Ditto ... | Chintalapudi Lock weir. | 2,790 | ... | ... | 2,500 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Improvements to the canal. | 87,150 | ... | 15,000 | 30,000 | |
| | (3.) Distributaries. | Ditto ... | C. Works. | Masonry works ... | 8,820 | ... | ... | 3,000 | |
| 15 | (2) Main Canals and Branches. | Bendamur Lanka Canal | B. Land... | Compensation for land. | 690 | ... | ... | 100 | 42,500 |
| | Ditto ... | Ditto ... | I. Navigation. | Indupalli Lock ... | 20,170 | ... | ... | 8,000 | |

# GOVERNMENT OF MADRAS.

SCHEDULE A.—SHOWING THE COMPONENT WORKS OF THE BUDGET ITEMS FOR 1884-85—*cont.*

| Item No. | Main Head. | Name of Canal. | Sub-Head. | Individual Works. | Amount of Estimate. | Outlay | | Grant, 1884-85. | Item Total. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | To end of 1882-83. | Probable during 1883-84. | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | | | **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT—continued.** | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | | | **51. Irrigation and Navigation—continued.** | | | | | |
| | | | | GODAVARI DELTA SYSTEM—*continued.* | | | | | |
| | | | | *Central Section.*—continued. | | | | | |
| | (2) Main Canals and Branches. | Bendamur Lunka Canal | I. Navigation. | Indupalli Lock weir improvements. | 1,300 | ... | ... | 1,300 | |
| | Ditto ... | Ditto ... | Ditto .. | Quarters for Lock establishment at Indupalli. | 860 | ... | ... | 860 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Improvements to the canal. | 9,000 | ... | ... | 2,000 | |
| | (3.) Distributaries. | Ditto ... | C. Works. | Masonry works. | 3,950 | ... | ... | 2,000 | |
| 16 | (4.) Drainages and Protective Works. | Gorinkala Drain. | L. Earthwork. | Gorinkala drain improvements. | 30,433 | 1,936 | 7,170 | 10,000 | 14,260 |
| | Ditto ... | Lower Cowsika Drain. | Ditto. | Lower Cowsika drain improvements. | 50,600 | 234 | 17,570 | 17,600 | |
| | Ditto ... | Kunaram Drain. | Ditto. | Improvements ... | 14,000 | .. | 5,000 | 5,000 | 32,600 |
| | | | | Total, Central Section. | ... | ... | ... | ... | 1,80,000 |
| | | | | *Western Section.* | | | | | |
| 17 | (2) Main Canals and Branches. | Main Canal. | B. Land... | Compensation for land. | 2,000 | 1,308 | 150 | 100 | |
| 18 | Ditto ... | Kakaraparu Canal. | Ditto ... | Compensation for land. | 5,000 | 2,618 | 100 | 100 | 100 |
| 19 | Ditto ... | Gostanaddi and Velpur Canal. | Ditto .. | Compensation for the improvements of Gostanaddi bends. | 1,200 | ... | 500 | 700 | 100 |
| | Ditto ... | Ditto ... | Ditto ... | Compensation for land. | 9,000 | 4,413 | 100 | 800 | |
| | Ditto ... | Ditto ... | I. Navigation. | Quarters for Lock establishment. | 1,720 | 463 | 500 | 757 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Improvements to Gostanaddi bends. | 4,260 | ... | 450 | 2,000 | |
| | (3.) Distributaries. | Ditto ... | B. Land ... | Compensation for land. | 1,290 | ... | 500 | 790 | |
| | Ditto ... | Ditto ... | C. Works. | Minor masonries. | 17,662 | 9,501 | 900 | 1,000 | |
| | Ditto ... | Ditto ... | L. Earthworks. | Minor channels. | 5,266 | 2,748 | 600 | 500 | |
| | (2) Main Canals and Branches. | Velpur Canal extension. | B. Land... | Compensation for land. | 2,900 | ... | 400 | 2,500 | |





# GOVERNMENT OF MADRAS.

SCHEDULE A.—SHOWING THE COMPONENT WORKS OF THE BUDGET ITEMS FOR 1884-85—*cont.*

| Item No. | Main Head. | Name of Canal. | Sub-Head. | Individual Works. | Amount of Estimate. | Outlay | | Grant, 1884-85. | Item Total. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | To end of 1882-83. | Probable during 1883-84. | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | | | **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT—continued.** | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | | | **51. Irrigation and Navigation—continued.** | | | | | |
| | | | | GODAVARI DELTA SYSTEM—*continued.* | | | | | |
| | | | | *Western Section*—continued. | | | | | |
| | (2) Main Canals and Branches. | Velpur Canal extensions. | (1) F. Other Cross Drainage Works. | Gunupudi Drain inlet. | 670 | ... | 300 | 370 | |
| | Ditto ... | Ditto ... | Ditto ... | Bhimavaram Drain aqueduct. | 2,430 | ... | 700 | 1,730 | |
| | Ditto ... | Ditto ... | G. Bridges. | Vissakoder bridge | 8,000 | ... | 4,000 | 4,000 | |
| | Ditto ... | Ditto ... | I. Navigation. | Bhimavaram lock. | 24,500 | ... | ... | 10,253 | |
| | Ditto ... | Ditto ... | Ditto. | Quarters for Lock establishment. | 1,720 | ... | 500 | 1,000 | |
| | Ditto ... | Ditto ... | L. Earthworks. | Extension of canal from 36 miles, 30 chains to Yenamudurru drain. | 17,314 | 2,914 | 8,500 | 5,000 | |
| | (3) Distributaries. | Ditto ... | C. Works. | Minor masonry works. | 2,570 | 1,028 | 600 | 942 | 32,342 |
| 20 | (2) Main Canals and Branches. | Bank Canal. | B. Land... | Compensation for land. | 4,420 | 3,788 | 200 | 100 | |
| | Ditto ... | Ditto ... | H. Escapes. | Surplus weir at Nakkala head. | 3,500 | ... | 1,000 | 2,500 | |
| | Ditto ... | Ditto ... | I. Navigation. | Quarters for Lock establishment. | 2,580 | ... | ... | 2,000 | |
| | (3) Distributaries. | Ditto ... | B. Land... | Compensation for land. | 450 | ... | ... | 150 | |
| | Ditto ... | Ditto ... | C. Works. | Minor masonries. | 7,448 | 3,748 | 1,000 | 2,000 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Minor channels... | 8,926 | 1,661 | 3,000 | 3,000 | |
| 21 | (3) Main Canals and Branches. | Narsápur Canal. | B. Land... | Compensation for land. | 2,000 | 1,242 | 100 | 100 | 9,750 |
| | Ditto ... | Ditto ... | I. Navigation. | Quarters for Lock establishment. | 8,000 | 2,250 | 3,400 | 2,250 | |
| 22 | Ditto ... | Ellore Canal. | B. Land .. | Compensation for land. | 2,400 | 907 | 50 | 50 | 2,350 |
| | Ditto .. | Ditto ... | F. R. and Hill Torrent Works. | Improvements to under tunnels. | 4,140 | 78 | 2,000 | 2,000 | |
| | Ditto ... | Ditto ... | H. Escapes. | Fitting with shutters and gearing to escapes 1, 2, 3 and 4. | 3,360 | ... | 900 | 2,460 | |
| | Ditto ... | Ditto ... | I. Navigation. | Quarters for Lock establishment. | 2,260 | 558 | 700 | 1,002 | |
| | (3) Distributaries. | Ditto ... | B. Land. | Compensation mid level channel. | 4,500 | 3,804 | 10 | 10 | |

# GOVERNMENT OF MADRAS.

SCHEDULE A.—SHOWING THE COMPONENT WORKS OF THE BUDGET ITEMS FOR 1884-85—*cont.*

| Item No. | Main Head. | Name of Canal. | Sub-Head. | Individual Works. | Amount of Estimate. | Outlay. To end of 1882-83. | Outlay. Probable during 1883-84. | Grant, 1884-85. | Item Total. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT—continued.** | | | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | **51. Irrigation and Navigation—continued.** | | | | | | | |
| | | GODAVARI DELTA SYSTEM—*continued.* | | | | | | | |
| | | *Western Section*—continued. | | | | | | | |
| | (3) Distributaries. | Ellore Canal. | B. Land | Compensation low level channel. | 1,200 | 939 | 10 | 10 | |
| | (4) Drainages and Protective Works. | Ditto ... | Ditto | Drains from 9¼ miles mid level channel. | 2,000 | 1,053 | 10 | 10 | |
| | Ditto ... | Ditto ... | Ditto | Pandicodu drain. | 2,000 | 1,335 | 10 | 10 | |
| | Ditto ... | Ditto ... | Ditto | Drainage diversion. | 500 | 120 | 10 | 10 | |
| 23 | (2) Main Canals and Branches. | Attili Canal. | Ditto | Compensation for land. | 3,000 | 2,090 | 50 | 20 | 5,562 |
| | Ditto ... | Ditto ... | I. Navigation. | Quarters for Lock establishment. | 2,080 | ... | 450 | 1,630 | |
| 24 | Ditto ... | Junction Canal. | Ditto | Quarters for Lock establishment. | 1,400 | ... | 650 | 750 | 1,650 |
| | Ditto .. | Ditto ... | B. Land... | Compensation for land. | 450 | 248 | 50 | 50 | |
| 25 | Ditto ... | Venkiah and Weyeru Canal. | I. Navigation. | Quarters for Lock establishment. | 4,160 | ... | 1,400 | 2,760 | 800 |
| | (3) Distributaries. | Ditto ... | B. Land... | Compensation for land. | 500 | 110 | 100 | 100 | |
| | Ditto ... | Ditto ... | C. Works. | Minor masonry works. | 18,780 | 4,654 | 1,000 | 3,400 | |
| | Ditto ... | Ditto ... | L. Earthworks. | Minor channels .. | 4,434 | 2,201 | 1,000 | 1,150 | |
| 26 | (2) Main Canals and Branches. | Undi Canal. | B. Land... | Compensation for land. | 1,800 | 1,521 | 100 | 100 | 7,410 |
| | Ditto ... | Ditto ... | I. Navigation. | Quarters for Lock establishment. | 1,900 | 350 | 900 | 650 | |
| | (3) Distributaries. | Ditto ... | B. Land .. | Compensation for land. | 1,350 | 786 | 200 | 200 | |
| | Ditto ... | Ditto ... | C. Works. | Minor masonries. | 30,216 | 9,850 | 800 | 6,000 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Do. channels .. | 34,123 | 17,534 | 2,000 | 6,000 | |
| | (4) Drainages and Protective Works. | Ditto ... | C. Works. | Do. masonries. | 6,000 | ... | 500 | 2,000 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Do. Drains ... | 2,950 | ... | 500 | 2,000 | |
| 27 | Ditto ... | Nakkala Drain. | B. Land. | Compensation for land. | 400 | .. | 100 | 300 | 16,950 |
| | Ditto ... | Ditto ... | C. Works. | Outfall sluice ... | 22,300 | ... | 9,100 | 12,500 | |
| 28 | Ditto ... | Yennamadurn Drain. | Ditto ... | Inlet ... ... | 13,855 | 10,306 | 500 | 3,140 | 12,800 |
| 29 | Ditto ... | Gonter Drain. | L. Earthwork. | Improvements to Basvaraju Codu. | 5,116 | ... | 400 | 4,700 | 3,140 |
| | | | | | | | | | 4,700 |





# GOVERNMENT OF MADRAS.

SCHEDULE A.—SHOWING THE COMPONENT WORKS OF THE BUDGET ITEMS FOR 1884-85—*cont.*

| Item No. | Main Head. | Name of Canal. | Sub-Head. | Individual Works. | Amount of Estimate. | Outlay. To end of 1882-83. | Outlay. Probable during 1882-83. | Grant, 1884-85. | Item Total. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT—continued.** | | | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | **51. Irrigation and Navigation—continued.** | | | | | | | |
| | | GODAVARI DELTA SYSTEM—*continued.* | | | | | | | |
| | | *Western Section*—continued. | | | | | | | |
| 30 | (4.) Drainages and Protective Works. | Baggeswaram Drain. | B. Land... | Compensation for land. | 650 | 140 | 40 | 50 | |
| | Ditto ... | Ditto ... | L. Earthworks. | Improvements to lower portions. | 9,600 | ... | 9,000 | 600 | 650 |
| 31 | Ditto ... | Kaza Drain. | B. Land... | Compensation for land. | 200 | ... | 30 | 50 | 50 |
| 32 | Ditto ... | Ruddraya Codu Drain. | L. Earthwork. | Improvements to 2 miles. | 3,000 | ... | 300 | 2,700 | 2,700 |
| 33 | Ditto ... | Minor Drain | Do. ... | Irlokodu improvements. | 9,000 | ... | 500 | 3,946 | 3,946 |
| | | | | TOTAL, WESTERN SECTION ... | ... | ... | ... | ... | 1,05,600 |
| | | | | TOTAL, GODAVARI DELTA SYSTEM. | ... | ... | ... | ... | 3,70,000 |
| | | KISTNA DELTA SYSTEM. | | | | | | | |
| | | *Eastern Section.* | | | | | | | |
| 34 | (2.) Main Canals and Branches. | Ryves Canal. | L. Earthwork. | Excavation of canal from junction of new cut to Pulleru. | 99,500 | 60,690 | 16,000 | 11,500 | |
| | Ditto ... | Ditto ... | O. Miscellaneous. | Six cattle crossings. | 1,795 | ... | ... | 500 | 12,000 |
| 35 | (1.) Head Works. | Head Works. | C. Works. | Anicut under sluices. | 12,936 | ... | ... | 9,000 | 9,000 |
| 36 | (2.) Main Canals and Branches. | Masulipatam Canal. | L. Earthwork. | Canal improvements. | 1,74,660 | ... | ... | 20,000 | 20,000 |
| 37 | Ditto ... | Ellore Canal. | F. R. and Hill Torrent Works. | Kesarapalli aqueduct. | 40,500 | 8,354 | 29,026 | 2,000 | |
| | Ditto .. | Ditto ... | Ditto ... | Ampapuram outlet. | 1,235 | ... | ... | 535 | |
| | Ditto ... | Ditto ... | Ditto ... | Do. Inlet ... | 1,280 | ... | ... | 780 | |
| | Ditto ... | Ditto ... | Ditto ... | Pedapadu outlet. | 2,765 | ... | ... | 1,765 | |
| | Ditto ... | Ditto ... | Ditto ... | West Tammileru aqueduct. | 13,000 | ... | ... | 10,000 | |
| | Ditto ... | Ditto ... | Ditto ... | East Tammileru surplus works. | 17,230 | ... | ... | 4,000 | |

# GOVERNMENT OF MADRAS.

SCHEDULE A.—SHOWING THE COMPONENT WORKS OF THE BUDGET ITEMS FOR 1884-85—*cont.*

| Item No. | Main Head. | Name of Canal. | Sub-Head. | Individual Works. | Amount of Estimate. | Outlay. To end of 1882-83. | Outlay. Probable during 1883-84. | Grant, 1884-85. | Item Total. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | | | **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT—continued.** | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | | | 51. Irrigation and Navigation—continued. | | | | | |
| | | | | KISTNA DELTA SYSTEM—*continued.* | | | | | |
| | | | | *Eastern Section*—continued. | | | | | |
| | (2) Main Canals and Branches. | Ellore Canal. | L. Earthwork. | Canal improvements. | 29,640 | ... | ... | 3,605 | |
| | (3.) Distributaries. | Ditto ... | B. Land... | Mupperu channel compensation for land. | 1,370 | ... | ... | 1,370 | |
| | Ditto ... | Ditto ... | C. Works. | Mupperu head sluice. | 1,000 | ... | ... | 1,000 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Mupperu channel. | 4,320 | ... | ... | 1,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Madapalli channel. | 5,320 | ... | ... | 1,000 | |
| | Ditto ... | Ditto ... | B. Land... | Compensation for land. | 1,410 | ... | ... | 1,410 | |
| | (4.) Drainages and Protective Works. | Ditto ... | C. Works. | Head sluice | ... | ... | ... | 500 | |
| | Ditto ... | Ditto ... | Ditto ... | 2·5 fall ... ... | 500 | ... | ... | 810 | |
| | | | | 3·40 fall ... ... | 810 | ... | ... | 725 | |
| | | | L. Earthwork. | West Taminilleru drain. | 1,320 | ... | ... | 2,500 | |
| 38 | (2.) Main Canals and Branches. | Bank Canal. | Ditto ... | Pedapad drain ... | 2,500 | ... | ... | 3,000 | 36,000 |
| | Ditto ... | Ditto ... | B. Land. | Compensation for land. | 6,780 | ... | ... | 4,036 | |
| 39 | (4) Drainages and Protective Works. | Uppulur Drain. | D. Regulators. | Head sluice ... | 10,000 | ... | 2,000 | 2,964 | 7,000 |
| | Ditto ... | Ditto ... | B. Land. | Compensation for land. | 6,940 | ... | ... | 520 | |
| | | | L. Earthwork. | Excavation ... | 1,028 | ... | 500 | 6,430 | |
| 40 | Ditto ... | Lazzabanda Drain. | B. Land. | Compensation for land. | 8,930 | ... | 10 | 3,072 | 6,950 |
| | Ditto ... | Ditto ... | L. Earthwork. | Excavation ... | 10,000 | ... | 1,500 | 14,978 | |
| | | | | TOTAL, EASTERN SECTION ... | 59,843 | ... | 2,000 | ... | 18,050 |
| | | | | | ... | ... | ... | ... | 1,09,000 |
| | | | | *Gudivada Division.* | | | | | |
| 41 | (2.) Main Canals and Branches. | Pullern Canal. | G. Bridges. | Bridge over junction canal. | 7,650 | ... | ... | 1,500 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Pulleru Main canal. | 16,000 | ... | ... | 3,000 | |
| | Ditto ... | Ditto ... | C. Works. | 11 masonry works. | 22,740 | ... | ... | 3,000 | |





# GOVERNMENT OF MADRAS.

SCHEDULE A.—SHOWING THE COMPONENT WORKS OF THE BUDGET ITEMS FOR 1884-85—*cont.*

| Item No. | Main Head. | Name of Canal. | Sub-Head. | Individual Works. | Amount of Estimate. | Outlay. To end of 1882-83. | Outlay. Probable during 1883-84. | Grant, 1884-85. | Item Total. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | | | **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT—continued.** | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | | | 51. Irrigation and Navigation—continued. | | | | | |
| | | | | KISTNA DELTA SYSTEM—*continued.* | | | | | |
| | | | | *Gudivada Division*—continued. | | | | | |
| | (3.) Distributaries. | Pulleru Canal | L. Earthwork. | Gudivada channel. | 16,020 | ... | 4,000 | 7,500 | |
| | Ditto ... | Ditto ... | B. Land. | Do. do. ... | 2,760 | ... | ... | 500 | |
| | Ditto ... | Ditto ... | C. Works. | Do. head sluice. | 2,720 | ... | 400 | 1,020 | |
| | Ditto ... | Ditto ... | Ditto ... | Gudivada bridge at 9th mile. | 2,600 | ... | 300 | 800 | |
| | Ditto ... | Ditto ... | Ditto ... | Gudivada channel regulator bridge at 9th mile. | 2,140 | ... | 300 | 940 | |
| | Ditto ... | Ditto ... | Ditto ... | Palakodu head sluice. | 900 | ... | 350 | 300 | |
| | Ditto ... | Ditto ... | Ditto ... | Chittram channel head sluice. | 900 | ... | ... | 600 | |
| | Ditto ... | Ditto ... | Ditto ... | Fixing screw gearing shutters to Kalidindi channel head sluice. | 680 | ... | ... | 16,000 | 35,460 |
| | Ditto ... | Ditto ... | L. Earthwork. | Chevurkodu ... | 57,585 | ... | ... | 3,064 | |
| 42 | (2) Main Canals and Branches. | Polraz Canal. | I. Navigation. | Raising banks of Polraz canal. | 3,564 | ... | 500 | 3,000 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Improving and widening. | 18,222 | ... | 7,000 | 1,300 | |
| | Ditto ... | Ditto ... | D. Regulators. | Fixing screw gearing shutters to Polraz canal head sluice. | 2,305 | ... | ... | 500 | |
| | Ditto ... | Ditto ... | B. Land. | Land compensation | 2,400 | ... | ... | 12,000 | |
| | Ditto ... | Ditto ... | I. Navigation. | Lock at 16th mile. | 18,450 | ... | 5,000 | 2,130 | |
| | Ditto ... | Ditto ... | E. Falls and Weirs. | Supply weir at 16th mile. | 2,925 | ... | 400 | 4,000 | |
| | (3) Distributaries. | Ditto ... | C. Works. | Minor sluices ... | 5,000 | ... | ... | 1,047 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Ramavaram channel. | 4,047 | ... | 3,000 | 195 | |
| | Ditto ... | Ditto ... | B. Land. | Do. do. ... | 695 | ... | ... | 400 | |
| | Ditto ... | Ditto ... | C. Works. | Do. head sluice. | 700 | ... | ... | 1,544 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Thandivada channel. | 2,544 | ... | 500 | 100 | |
| | Ditto ... | Ditto ... | B. Land. | Do. do. ... | 368 | ... | 150 | 500 | |
| | Ditto ... | Ditto ... | C. Works. | Do. head sluice. | 500 | ... | ... | 500 | 29,780 |
| 43 | Ditto ... | Ryves' Canal. | B. Land... | Despad channel... | 3,385 | ... | ... | 5,000 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Do. ... | 17,150 | ... | ... | | |

# GOVERNMENT OF MADRAS.

SCHEDULE A.—SHOWING THE COMPONENT WORKS OF THE BUDGET ITEMS FOR 1883-84—*cont.*

| Item No. | Main Head. | Name of Canal. | Sub-Head. | Individual Works. | Amount of Estimate. | Outlay. To end of 1882-83. | Outlay. Probable during 1883-84. | Grant, 1884-85. | Item Total. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | | **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT—continued.** | | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | | 51. Irrigation and Navigation—continued. KISTNA DELTA SYSTEM—*continued.* | | | | | | |
| | | | *Gudicdda Division*—continued. | | | | | | |
| | (3) Distributaries. | Ryves' Canal | C. Works. | Head sluice ... | 3,970 | ... | ... | 2,900 | 8,400 |
| 44 | (2.) Main Canals and Branches. | Bantumilli Canal. | I. Navigation. | Head lock ... | 2,342 | ... | 2,000 | 342 | |
| | Ditto ... | Ditto ... | Ditto ... | Head sluice improvements. | 950 | ... | ... | 658 | |
| | Ditto ... | Ditto ... | Ditto ... | Lock at 5½ miles at Kamalapuram. | 20,310 | ... | ... | 5,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Lock at 15th mile at Paudvaka. | 21,500 | ... | ... | 5,000 | |
| | Ditto ... | Ditto ... | D. Regulators. | Improvements to supply weir at head. | 1,060 | ... | ... | 800 | |
| 45 | (4.) Drainages and Protective Works. | Polraz drain. | B. Land... | Polraz main drain. | 15,370 | ... | 300 | 500 | 11,800 |
| | Ditto ... | Ditto ... | L. Earthwork. | Do. ... | 61,120 | ... | 12,000 | 6,000 | |
| | Ditto ... | Ditto ... | B. Land... | Komaravole affluent. | 7,260 | ... | 718 | 500 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Do. ... | 12,809 | ... | 500 | 6,000 | |
| 46 | Ditto ... | Chendraya codu drain. | Ditto ... | Palakodu affluent. | 2,078 | ... | ... | 1,500 | 14,500 |
| | Ditto ... | Ditto ... | B. Land... | Chendraya codu main drain. | 19,740 | ... | 1,573 | 1,000 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Do. ... | 65,920 | 163 | 6,000 | 6,000 | |
| 47 | Ditto ... | Pullava drain. | C. Works. | Culvert under Ryves' canal. | 10,950 | ... | 4,619 | 4,770 | 11,770 |
| | Ditto ... | Ditto ... | B. Land... | Pullava main drain. | 750 | ... | 100 | 200 | |
| | | | L. Earthwork. | Do. ... | 12,700 | ... | 2,000 | 3,000 | |
| 48 | Ditto ... | Dammidi drain. | Ditto ... | Dammidi drain ... | 5,986 | ... | ... | 1,000 | 3,200 |
| 49 | Ditto ... | Pedda Kommileru drain and affluents. | Ditto ... | Lingala drain (Chinna Kommileru affluents). | 21,815 | ... | ... | 6,000 | 1,000 |
| 50 | Ditto ... | Pedalanka drain and affluents. | Ditto ... | Pedalanka drain. | 89,923 | ... | ... | 4,090 | 6,000 |
| | | | | | | | | | 4,090 |
| | | | | TOTAL, GUDIVADI DIVISION. | ... | ... | ... | ... | 1,26,000 |





# GOVERNMENT OF MADRAS.

SCHEDULE A.—SHOWING THE COMPONENT WORKS OF THE BUDGET ITEMS FOR 1884-85—*cont.*

| Item No. | Main Head. | Name of Canal. | Sub-Head. | Individual Works. | Amount of Estimate. | Outlay. To end of 1882-83. | Outlay. Probable during 1883-84. | Grant, 1884-85. | Item Total. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | | **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT—continued.** | | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | | 51. Irrigation and Navigation—continued. KISTNA DELTA SYSTEM—*continued.* | | | | | | |
| | | | *Western Section* | | | | | | |
| 51 | (2.) Main Canals and Branches. | Main Canal. | B. Land... | Compensation for land. | 3,500 | 2,000 | 1,500 | ... | |
| | Ditto ... | Ditto ... | L. Earthwork. | Widening ... | 5,34,520 | 90,419 | 37,700 | 44,000 | 44,000 |
| 52 | Ditto ... | Commamur Canal. | B. Land .. | Compensation for land. | 7,780 | 4,248 | 4,000 | ... | |
| | Ditto ... | Ditto ... | F. River and hill torrent works. | Parcharvagu outlet. | 2,130 | ... | ... | 2,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Swerna outlet ... | 1,060 | ... | ... | 1,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Cheruku outlet ... | 3,290 | ... | ... | 3,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Improvements to Alleru surplus weir. | 2,550 | ... | 1,500 | 1,050 | |
| | Ditto ... | Ditto ... | Ditto ... | Firinghidibba inlet. | 5,880 | ... | 600 | 3,950 | |
| | Ditto ... | Ditto ... | Ditto ... | Appapuram outlet. | 8,970 | ... | ... | 3,000 | |
| | Ditto ... | Ditto ... | F. Other cross drainage works. | Swerna aqueduct. | 11,080 | ... | ... | 8,000 | |
| | Ditto ... | Ditto ... | G. Bridges. | Bridge at Karenchedu. | 9,760 | ... | 4,000 | 5,700 | |
| | Ditto ... | Ditto ... | Ditto ... | Coast road bridge. | 10,600 | ... | ... | 2,300 | |
| | Ditto ... | Commamur Canal. | I. Navigation. | Improvements to Jagerlamudi lock. | 1,100 | ... | ... | 1,000 | |
| | Ditto ... | Ditto ... | K. Buildings. | Nallamada rest house. | 2,200 | ... | ... | 2,000 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Improvements to Commamur canal. | 2,80,590 | 91,216 | 5,000 | 6,000 | |
| | Ditto ... | Ditto ... | O. Miscellaneous. | Cattle crossings at Kunkalamarru. | 1,100 | ... | 500 | 600 | |
| | Ditto ... | Ditto ... | Ditto ... | Do. Vadlamudi ... | 900 | ... | 500 | 400 | |
| | Ditto ... | Ditto ... | Ditto ... | Do. Duggirala ... | 1,100 | ... | 500 | 500 | |
| | (3.) Distributaries. | Ditto ... | L. Earthwork. | Distributaries ... | 1,43,233 | 38,233 | ... | 5,000 | 45,500 |
| 53 | (2.) Main Canals and Branches. | Bank Canal. | B. Land... | Compensation for land. | ... | ... | ... | ... | |
| | Ditto ... | Ditto ... | I. Navigation. | Vellatur lock ... | 19,474 | ... | 4,000 | 15,474 | |
| | Ditto ... | Ditto ... | Ditto ... | Do. weir ... | 1,578 | ... | 600 | 978 | |

# GOVERNMENT OF MADRAS.

SCHEDULE A.—SHOWING THE COMPONENT WORKS OF THE BUDGET ITEMS FOR 1884-85—*cont.*

| Item No. | Main Head. | Name of Canal. | Sub-Head. | Individual Works. | Amount of Estimate. | Outlay | | Grant, 1884-85. | Item Total. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | To end of 1882-83. | Probable during 1883-84. | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | | | **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT—continued.** | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | | | **51. Irrigation and Navigation—continued.** | | | | | |
| | | | | KISTNA DELTA SYSTEM—*continued.* | | | | | |
| | | | | *Western Section*—continued. | | | | | |
| | (2.) Main Canals and Branches—*cont.* | Bank Canal. | L. Earthwork. | Improvements ... | 15,715 | ... | ... | 8,548 | |
| | (3.) Distributaries. | Ditto ... | Ditto ... | Minor channels. | 15,000 | ... | ... | 7,000 | 33,000 |
| 54 | (4.) Drainages and Protective Works. | Répálle main drain. | B. Land. | Compensation for land. | 18,300 | ... | 650 | 7,000 | |
| | Ditto ... | Ditto ... | G. Bridges. | Masonry bridges. | 29,124 | ... | ... | 5,000 | |
| 55 | Ditto ... | Tungabhadra drain. | L. Earthwork. | Improvements ... | 1,42,700 | 9,092 | ... | 28,000 | 40,000 |
| | Ditto ... | Ditto ... | B. Land... | Compensation for land. | 17,092 | ... | 80 | 4,000 | |
| | | | L. Earthwork. | Improvements ... | 4,92,153 | ... | ... | 8,000 | |
| 56 | Ditto ... | Romperu drain. | B. Land... | Compensation for land. | 1,500 | ... | ... | 1,000 | 12,000 |
| | Ditto ... | Ditto ... | L. Earthwork. | Improvements ... | 1,60,810 | ... | ... | 9,000 | |
| | | | | TOTAL, WESTERN SECTION. | ... | ... | ... | | 10,000 |
| | | | | | | | | | 1,84,500 |
| | | | | TOTAL KISTNA DELTA SYSTEM. | ... | ... | ... | | 4,19,500 |
| | | | | SANGAM ANICUT PROJECT. | | | | | |
| 57 | (1.) Head Works. | Head Works. | C. Works. | Anicut ... | 4,34,500 | 1,66,670 | 85,000 | 1,00,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Under-sluice ... | 71,100 | 25,551 | 40,000 | 5,440 | |
| | Ditto ... | Ditto ... | O. Miscellaneous. | Miscellaneous ... | 11,215 | 6,525 | 6,000 | 1,000 | |
| | | | P. Maintenance. | Repairs to temporary bridges. | 2,890 | ... | 700 | 500 | 1,06,940 |
| 58 | (2.) Main Canals and Branches. | Kanigiri Canal. | B. Land ... | Kanigiri reservoir. | 1,89,500 | 5,327 | 10,959 | 70,000 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Excavation and banking. | 2,38,402 | 99,006 | 60,000 | 50,000 | |
| | | | N. Tanks and reservoirs. | Kanigiri reservoir, earthwork and revetment, &c. | 1,88,915 | 36,718 | 85,000 | 60,000 | |
| | Ditto ... | Ditto ... | Do. ... | Surplus weir ... | 41,805 | 17,999 | 16,000 | 5,000 | |
| | Ditto ... | Ditto ... | O. Miscellaneous. | Gandavaram head-sluice demolishing. | 100 | ... | ... | 100 | 1,85,100 |





# GOVERNMENT OF MADRAS.

SCHEDULE A.—SHOWING THE COMPONENT WORKS OF THE BUDGET ITEMS FOR 1884-85—*cont.*

| Item No. | Main Head. | Name of Canal. | Sub-Head. | Individual Works. | Amount of Estimate. | Outlay | | Grant, 1884-85. | Item Total. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | To end of 1882-83. | Probable during 1883-84. | | |
| 1 | | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | | | **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT—continued** | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | | | **51. Irrigation and Navigation—continued.** | | | | | |
| | | | | SANGAM ANICUT SYSTEM—*continued.* | | | | | |
| 59 | (2) Main Canals and Branches—*cont.* | Duvur Canal. | L. Earthwork. | Excavation and banking. | 2,000 | ... | ... | 2,000 | |
| | Ditto ... | Ditto ... | N. Tanks and reservoirs. | Duvur reservoir improvements. | 8,935 | ... | 2,000 | 3,930 | 5,930 |
| 60 | (3.) Distributaries. | Eastern Channel. | C. Works. | Head-sluice .. | 20,620 | 9,854 | 5,000 | 5,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Fall No. 1 ... | 4,800 | ... | 2,000 | 2,800 | |
| | Ditto ... | Ditto ... | Ditto ... | Ditto 2 ... | 4,800 | ... | 2,000 | 2,800 | |
| | Ditto ... | Ditto .. | Ditto ... | Ditto 3 ... | 4,800 | ... | 2,000 | 2,800 | |
| | Ditto ... | Ditto ... | Ditto ... | Ditto 4 ... | 4,800 | ... | 2,000 | 2,800 | |
| | Ditto ... | Ditto ... | Ditto ... | Irrigation sluice, No. 1 | 1,010 | ... | ... | 1,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Ditto No. 2 ... | 1,010 | ... | ... | 1,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Ditto No. 3 ... | 1,010 | ... | ... | 1,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Ditto No. 4 ... | 1,010 | ... | ... | 1,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Ditto No. 5 ... | 1,010 | ... | ... | 800 | |
| | Ditto ... | Ditto ... | Ditto ... | Ditto No. 6 ... | 1,010 | ... | ... | 800 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Excavation and banking. | 1,11,147 | 889 | 50,000 | 20,000 | 42,000 |
| 61 | Ditto ... | Yellayapalem branch channel. | C. Works. | Regulating sluice. | 950 | ... | ... | 950 | |
| | Ditto ... | Ditto .. | Ditto ... | 2 drainage culverts. | 6,400 | ... | ... | 3,000 | |
| | Ditto ... | Ditto ... | Ditto ... | 1 drop .. ... | 1,610 | ... | ... | 1,600 | |
| | Ditto ... | Ditto ... | Ditto ... | 3 Irrigation sluices. | 3,030 | ... | ... | 1,500 | |
| | Ditto ... | Ditto ... | L. Earthwork | Excavation and banking. | 3,200 | ... | 1,000 | 2,200 | 9,250 |
| 62 | Ditto ... | Alleru channel. | B. Land ... | Compensation for land. | 4,450 | ... | ... | 4,000 | |
| | Ditto ... | Ditto ... | C. Works. | Head-sluice ... | 9,250 | ... | ... | 5,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Regulator and bridge. | 6,100 | ... | ... | 3,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Pyderu dam, north weir, lowering crest. | 30 | ... | ... | 30 | |
| | Ditto ... | Ditto ... | Ditto ... | 2 irrigation sluices. | 2,140 | ... | ... | 1,000 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Excavation ... | 2,260 | ... | ... | 2,260 | |
| | Ditto ... | Ditto ... | Ditto ... | Embankment between the 2 weirs of the Pydern dam weirs. | 250 | ... | ... | 250 | 15,540 |

# GOVERNMENT OF MADRAS.

SCHEDULE A.—SHOWING THE COMPONENT WORKS OF THE BUDGET ITEMS FOR 1884-85—*cont.*

| Item No. | Main Head. | Name of Canal. | Sub-Head. | Individual Works. | Amount of Estimate. | Outlay | | Grant, 1884-85. | Item Total. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | To end of 1882-83. | Probable during 1883-84. | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | | | **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT—continued.** | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | | | 51. Irrigation and Navigation—continued. | | | | | |
| | | | | SANGAM ANICUT SYSTEM—*continued.* | | | | | |
| 63 | (3.) Distributaries—*cont.* | Allerı Branch Channel. | B. Land. | Compensation for land. | 4,450 | ... | ... | 3,450 | |
| | Ditto ... | Ditto ... | C. Works. | Regulating sluice. | 4,350 | ... | 500 | 1,500 | |
| | Ditto ... | Ditto ... | Ditto ... | Two falls in the 1st and 2nd miles. | 14,080 | ... | ... | 5,000 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Excavation and banking. | 11,570 | ... | 1,000 | 8,000 | |
| | | | | | | | | | 17,950 |
| 64 | Ditto ... | Southern Channel. | B. Land. | Compensation for land. | 1,510 | ... | ... | 510 | |
| | Ditto ... | Ditto ... | C. Works. | Bridge ... ... | 5,330 | ... | ... | 4,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Drainage culvert. | 6,000 | ... | ... | 3,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Regulating sluice | 4,100 | ... | ... | 2,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Drainage culvert. | 10,400 | ... | 500 | 5,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Bridge ... ... | 1,940 | ... | ... | 1,940 | |
| | Ditto ... | Ditto ... | Ditto ... | Two irrigation sluices. | 2,020 | ... | ... | 1,200 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Excavation and banking. | 24,640 | 24 | 1,000 | 20,000 | |
| | Ditto ... | Ditto ... | Ditto ... | One distribution channel | 600 | ... | ... | 600 | |
| | Ditto ... | Ditto ... | Ditto ... | Ditto | 350 | ... | ... | 350 | |
| | Ditto ... | Ditto ... | B. Land. | Compensation for land. | 4,575 | ... | ... | 1,800 | |
| | Ditto ... | Ditto ... | C. Works. | Two bridges, 2nd and 3rd mile. | 2,400 | ... | ... | 2,400 | |
| | Ditto ... | Ditto ... | Ditto ... | Drainage culvert, 4th mile. | 2,250 | ... | ... | 1,700 | |
| | Ditto ... | Ditto ... | Ditto ... | Two drainage culvert, fifth miles. | 13,200 | ... | ... | 4,000 | |
| | Ditto ... | Ditto ... | Ditto ... | One fall in 6th mile. | 4,550 | ... | ... | 2,000 | |
| | Ditto ... | Ditto ... | Ditto ... | One fall in 9th mile. | 3,900 | ... | ... | 1,500 | |
| | Ditto ... | Ditto ... | Ditto ... | One aqueduct, 9th mile. | 2,400 | ... | ... | 1,500 | |
| | Ditto ... | Ditto ... | Ditto ... | One bridge, 11th mile. | 1,450 | ... | ... | 1,450 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Excavation and banking. | 1,07,395 | ... | 1,000 | 18,050 | |
| | Ditto ... | Ditto ... | Ditto ... | Bank across the head of Mudivarthi tank and supply channel. | 50 | ... | ... | 50 | |





# GOVERNMENT OF MADRAS.

SCHEDULE A.—SHOWING THE COMPONENT WORKS OF THE BUDGET ITEMS FOR 1884-85—*cont.*

| Item No. | Main Head. | Name of Canal. | Sub-Head. | Individual Works. | Amount of Estimate. | Outlay | | Grant, 1884-85. | Item Total. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | To end of 1882-83. | Probable during 1883-84. | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | | | **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT—continued.** | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | | | 51. Irrigation and Navigation—continued. | | | | | |
| | | | | SANGAM ANICUT SYSTEM—*continued.* | | | | | |
| | (3) Distributaries—*cont.* | Southern Channel—*cont.* | L. Earthwork—*cont.* | Three distribution channels. | 1,800 | ... | ... | 1,800 | |
| | Ditto ... | Ditto .. | Ditto ... | Six do. do. ... | 1,500 | ... | ... | 1,500 | |
| | Ditto ... | Ditto ... | Ditto ... | One distribution channel. | 300 | ... | ... | 300 | |
| | Ditto ... | Ditto ... | Ditto ... | Three ditto ... | 450 | ... | ... | 450 | |
| | Ditto ... | Ditto ... | Ditto ... | Three ditto ... | 600 | ... | ... | 600 | |
| | Ditto ... | Ditto ... | Ditto ... | One ditto ... | 350 | ... | ... | 350 | |
| | Ditto ... | Ditto ... | Ditto ... | Two ditto ... | 200 | ... | ... | 200 | |
| | Ditto ... | Ditto ... | Ditto ... | One ditto ... | 1,900 | ... | ... | 1,900 | |
| | Ditto ... | Ditto ... | Ditto ... | One ditto ... | 400 | ... | ... | 400 | |
| | Ditto ... | Ditto ... | Ditto ... | One ditto ... | 500 | ... | ... | 500 | |
| | Ditto ... | Ditto ... | Ditto ... | One ditto ... | 750 | ... | ... | 750 | |
| | | | | | | | | | 81,800 |
| 65 | Ditto ... | Central Channel. | B. Land. | Compensation for land. | 1,240 | ... | ... | 240 | |
| | Ditto ... | Ditto ... | C. Works. | Regulating sluice. | 2,250 | ... | 500 | 1,500 | |
| | Ditto ... | Ditto ... | Ditto .. | Fall in 4th mile. | 2,770 | ... | ... | 1,200 | |
| | Ditto ... | Ditto ... | Ditto ... | Road tunnel, 5th mile. | 1,310 | ... | ... | 1,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Fall in the 9th mile. | 2,800 | ... | ... | 1,500 | |
| | Ditto ... | Ditto .. | Ditto ... | Eleven irrigation sluices. | 11,100 | ... | ... | 6,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Six irrigation sluices. | 6,420 | ... | ... | 3,000 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Excavation and banking. | 19,750 | 62 | 5,000 | 16,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Two distribution channels, at Rs 200 each. | 400 | ... | ... | 400 | |
| | | | | 2 do. at Rs. 225 | 450 | ... | ... | 450 | |
| | | | | 2 do. at „ 250 | 500 | ... | ... | 500 | |
| | | | | 2 do. at „ 350 | 700 | ... | ... | 700 | |
| | | | | 2 do. at „ 325 | 650 | ... | ... | 650 | |
| | | | | 4 do. at „ 275 | 1,100 | ... | ... | 1,100 | |
| | Ditto ... | Ditto ... | Ditto ... | Two distribution channels at Rs. 375 each. | 750 | ... | ... | 750 | |
| | | | | 1 do. at Rs. 500 | 500 | ... | ... | 500 | 35,490 |
| | | | | TOTAL, SANGAM ANICUT PROJECT. | ... | ... | ... | | 5,00,000 |

# GOVERNMENT OF MADRAS.

SCHEDULE A.—SHOWING THE COMPONENT WORKS OF THE BUDGET ITEMS FOR 1884-85—*cont.*

| Item No. | Main Head. | Name of Canal. | Sub-Head. | Individual Works. | Amount of Estimate. | Outlay. To end of 1882-83. | Outlay. Probable during 1883-84. | Grant, 1884-85. | Item Total. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT—continued.** | | | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | **51. Irrigation and Navigation—continued.** | | | | | | | |
| | | BARUR TANK PROJECT. | | | | | | | |
| 66 | (1.) Head Works. | ... | C. Works. | Nedungal anicut across the Ponniár. | 18,035 | ... | ... | 18,000 | 18,000 |
| 67 | (2.) Main Canals and Branches. | Agaram channel. | D. Regulators. | Agaram channel head-sluice. | 9,600 | ... | ... | 4,000 | |
| | Ditto ... | Ditto ... | L. Earthwork. | New head to Agaram channel | 1,055 | ... | ... | 1,000 | 5,000 |
| 68 | Ditto ... | Barur tank supply channel. | Ditto ... | Barur tank supply channel. | 48,004 | ... | 4,000 | 25,000 | |
| | Ditto ... | Ditto ... | D. Regulators | Head-sluices ... | 5,210 | ... | ... | 3,000 | |
| | Ditto ... | Ditto ... | F(1.)Other cross drainage works. | Fifteen inlets ... | 557 | ... | ... | 500 | |
| | Ditto ... | Ditto ... | Ditto ... | Seventeen outlets | 3,771 | ... | ... | 2,500 | |
| | Ditto ... | Ditto ... | N. Tanks. | Barur tank bund. | 53,115 | ... | 4,035 | 15,000 | 46,000 |
| | | | | TOTAL, BARUR TANK PROJECT. | ... | ... | ... | ... | 69,000 |
| | | CAUVERY DELTA SYSTEM. | | | | | | | |
| 69 | (1.) Head Works. | ... | C. Works. | Grand anicut alterations. | 55,950 | ... | 1,640 | 36,000 | |
| | Ditto ... | ... | Ditto ... | Dam at Vennár head. | 12,295 | ... | ... | 7,300 | 43,300 |
| 70 | (2.) Main Canals and Branches. | Cauvery ... | D. Regulators. | Cauvery head-sluice. | 1,59,640 | 14,483 | 48,618 | 60,000 | 60,000 |
| 71 | Ditto ... | Vennaur ... | B. Land. | Compensation for land. | 35,550 | 12,442 | ... | 13,000 | |
| | Ditto ... | Ditto ... | D. Regulators. | Head-sluice ... | 1,24,000 | ... | 27,500 | 50,000 | |
| | Ditto ... | Ditto ... | F(1.)Other cross drainage works. | Under-tunnel right bank. | 13,160 | ... | ... | 9,000 | |
| | | | Ditto ... | Under-tunnel 2 feet span left bank. | 1,320 | ... | ... | 1,000 | |





# GOVERNMENT OF MADRAS.

SCHEDULE A.—SHOWING THE COMPONENT WORKS OF THE BUDGET ITEMS FOR 1884-85—*cont.*

| Item No. | Main Head. | Name of Canal. | Sub-Head. | Individual Works. | Amount of Estimate. | Outlay. To end of 1882-83. | Outlay. Probable during 1883-84. | Grant, 1884-85. | Item Total. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT—continued.** | | | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | **51. Irrigation and Navigation—continued** | | | | | | | |
| | | CAUVERY DELTA SYSTEM—*continued.* | | | | | | | |
| | (2.) Main Canals and Branches. | Vennár ... | L. Earthwork. | Excavation ... | 51,250 | ... | 1,400 | 33,000 | |
| | (3.) Distributaries. | | | | | | | | |
| | Ditto ... | Ditto ... | C. Works. | Pillay-Voikal head-sluice. | 2,300 | ... | ... | 2,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Pillay Voikal sluice. | 435 | ... | ... | 400 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Pillay Voikal channel. | 310 | ... | ... | 300 | |
| | | | | | | | | | 1,08,700 |
| | | | | TOTAL, CAUVERY DELTA SYSTEM. | ... | ... | ... | ... | 2,12,000 |
| | | SRIVAIKUNTHAM ANICUT SYSTEM. | | | | | | | |
| | | *Northern Section.* | | | | | | | |
| 72 | (2.) Main Canals and Branches. | North Main Channel. | B. Land. | Korampullum tank compensation for land. | 15,553 | ... | 10,553 | 5,000 | |
| | Ditto ... | Ditto ... | Ditto ... | Maruduni tank compensation for land. | 7,053 | ... | 6,620 | 433 | |
| | Ditto ... | Ditto ... | Ditto ... | Pottukulam tank. | 1,363 | ... | 759 | 604 | |
| | Ditto ... | Ditto ... | F (1) Other cross drainage works. | Outlet at 9 miles 60 chains. | 10,750 | 3,534 | 5,773 | 1,443 | |
| | Ditto ... | Ditto ... | Ditto ... | Revetting left bank, 8 miles 60 chains. | 3,680 | 1,199 | 2,106 | 329 | |
| | Ditto ... | Ditto ... | Ditto ... | Yeral bridge alterations. | 2,060 | 473 | 1,180 | 407 | |
| | Ditto ... | Ditto ... | N. Tanks and reservoirs. | Korampullum tank revetment. | 79,060 | 76,429 | ... | 2,631 | |
| | Ditto ... | Ditto ... | Ditto ... | Upper Odai dam. | 39,310 | 34,761 | ... | 4,549 | |
| | Ditto ... | Ditto ... | Ditto ... | Korampullum tank cutting the bank of surplus drain and revetting the tank bank. | 4,738 | 2,505 | ... | 2,003 | |
| | (3.) Distributaries. | Ditto ... | C. Works. | Small sluices ... | 9,000 | 7,508 | ... | 1,492 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Melavallam and Mulakadu channel improvements. | 3,690 | ... | ... | 3,690 | |

# GOVERNMENT OF MADRAS.

SCHEDULE A.—SHOWING THE COMPONENT WORKS OF THE BUDGET ITEMS FOR 1884-85.

| Item (No. | Main Head. | Name of Canal. | Sub-Head. | Individual Works. | Amount of Estimate. | Outlay. To end of 1882-83. | Outlay. Probable during 1883-84. | Grant, 1884-85. | Item Total. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | **N. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT.** | | | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | **51. Irrigation and Navigation—continued.** | | | | | | | |
| | | SRIVAIKUNTHAM ANICUT SYSTEM—*continued.* | | | | | | | |
| | | *Northern Section*—continued. | | | | | | | |
| | (3.) Distributaries. | North Main Channel. | L. Earthwork. | Minor Channels... | 25,500 | 21,317 | ... | 4,066 | |
| | (4.) Drainages and Protective Works. | Ditto .. | B. Land. | Compensation for land for Upper Odai embankment. | 1,841 | ... | ... | 1,841 | |
| | (3.) Distributaries. | Tuticorin Channel. | Ditto ... | Tuticorin channel compensation for land. | 575 | 518 | ... | 57 | |
| | | | | TOTAL, NORTHERN SECTION. | ... | ... | ... | ... | 28,545 |
| | | *Southern Section.* | | | | | | | |
| 73 | (2.) Main Canals and Branches. | South Main Channel. | B. Land. | Widening the main channel. | 11,349 | 9,796 | ... | 1,553 | |
| | (3.) Distributaries. | Authur Channel. | Ditto ... | Land compensation for new Authur channel. | 2,117 | 1,939 | ... | 178 | |
| | Ditto ... | Ditto ... | Ditto ... | Land compensation for Old Authur channel. | 469 | ... | ... | 469 | |
| | Ditto ... | Ditto ... | Ditto ... | Compensation for land for Authur and Keeranur tanks. | 332 | ... | .. | 332 | |
| | Ditto ... | Ditto ... | Ditto ... | Compensation for land for Authur Channel. | 2,586 | ... | ... | 647 | |
| | Ditto ... | Ditto ... | C. Works. | Improving irrigation sluices. | 4,446 | 817 | 3,107 | 522 | |
| | Ditto ... | Ditto ... | L. Earthwork. | Authur channel improvements. | 4,551 | ... | 2,051 | 2,500 | |
| | Ditto ... | Ditto ... | N. Tanks and reservoirs. | Authur and Keeranur tank improvements. | 10,531 | 1,093 | 8,854 | 584 | |
| | Ditto ... | Ditto ... | Ditto ... | Authur ditto ... | 85 | ... | ... | 85 | |
| | Ditto ... | Ditto ... | Ditto ... | Kuranur ditto ... | 247 | ... | ... | 247 | |
| | | | | TOTAL, SOUTHERN SECTION. | ... | ... | ... | ... | 7,117 |
| | | | | TOTAL, SRIVAIKUNTHAM ANICUT SYSTEM. | ... | ... | ... | ... | 7,117 |
| | | | | | | | | | 35,662 |



FINAL ISSUE.

3032/26

**PUBLIC WORKS NOT CLASSED AS PRODUCTIVE—IRRIGATION AND NAVIGATION—AND FAMINE RELIEF AND INSURANCE—IRRIGATION.** **MADRAS PRESIDENCY.**

## PUBLIC WORKS DEPARTMENT.

# BUDGET ESTIMATE

OF

# PUBLIC WORKS NOT CLASSED AS PRODUCTIVE—IRRIGATION AND NAVIGATION—

AND

# FAMINE RELIEF AND INSURANCE—IRRIGATION,

IN THE

# MADRAS PRESIDENCY,

IMPERIAL AND PROVINCIAL.

**FOR THE YEAR**

## 1884-85.

29th April 1884.

(Signed) J. O. HASTED, Colonel, R.E.,
Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

3332/25

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# GOVERNMENT OF MADRAS.

BUDGET ESTIMATE OF THE REVENUE FROM IRRIGATION AND NAVIGATION, AGRICULTURAL AND PROTECTIVE WORKS, IN THE MADRAS PRESIDENCY FOR THE YEAR FROM 1ST APRIL 1884 TO 31ST MARCH 1885.

| — | Budget Estimate, 1884-85. | Revised Estimate, 1883-84. | Budget Estimate, 1883-84. | Actual Realizations. |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| **H. RECEIPTS ON ACCOUNT OF PUBLIC WORKS NOT CLASSED AS PRODUCTIVE.** | Rs. | Rs. | Rs. | Rs. |
| XXVI. IRRIGATION AND NAVIGATION. | | | | |
| IMPERIAL. | | | | |
| Works for which Capital and Revenue Accounts are kept. | | | | |
| Chembrambakam Tank ... ... ... ... ... ... | 50 | 100 | 100 | 85 |
| Pálár Anicut System ... ... ... ... ... ... ... | 550 | 270 | 270 | 266 |
| Pelandorai Anicut System ... ... ... ... ... ... | 50 | 50 | 50 | ... |
| Total Works for which Capital and Revenue Accounts are kept ... | 650 | 420 | 420 | 351 |
| Works for which neither Capital nor Revenue Accounts are kept ... | 12,000 | 12,000 | 15,000 | 12,146 |
| Agricultural Works ... ... ... ... ... ... ... ... | 10,000 | 10,000 | 19,000 | 10,130 |
| Total, Imperial ... | 22,650 | 22,420 | 34,420 | 22,627 |
| PROVINCIAL. | | | | |
| Madras Water-supply and Irrigation Extension Project ... ... | 5,960 | 30,000 | 12,000 | 32,336 |
| Buckingham Canal ... ... ... ... ... ... ... | 33,100 | 42,580 | 1,17,000 | 1,08,127 |
| Total, Provincial ... | 39,060 | 72,580 | 1,29,000 | 1,40,46 |
| Grand Total ... | 61,710 | 95,000 | 1,63,420 | 1,63,0 |





3032/28

# GOVERNMENT OF MADRAS.

ABSTRACT BUDGET ESTIMATE OF EXPENDITURE ON IRRIGATION AND NAVIGATION, AGRICULTURAL AND PROTECTIVE WORKS, IN THE MADRAS PRESIDENCY FOR THE YEAR FROM 1ST APRIL 1884 TO 31ST MARCH 1885.

| — | Reference to Detailed Estimate. | Budget Estimate, 1884-85. | Revised Estimate, 1883-84. | Budget Estimate, 1883-84. | Actual Outlay, 1882-83. |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| **H. EXPENDITURE ON PUBLIC WORKS NOT CLASSED AS PRODUCTIVE.** | Page. | Rs. | Rs. | Rs. | Rs. |
| 44. IRRIGATION AND NAVIGATION. | | | | | |
| IMPERIAL. | | | | | |
| *Works for which Capital and Revenue Accounts are kept.* | | | | | |
| CAPITAL. | | | | | |
| I.—WORKS ... ... ... ... ... ... | 7 & 8 | ... | 3,289 | 58,634 | —92,872 |
| II.—ESTABLISHMENT ... ... ... ... ... | 16 | ... | ... | 13,487 | —23,511 |
| III.—TOOLS AND PLANT ... ... ... ... ... | 18 | ... | ... | 879 | — 1,642 |
| Total, ... | | ... | 3,289 | 73,000 | —1,18,025 |
| REVENUE. | | | | | |
| I-A.—EXTENSIONS AND IMPROVEMENTS ... ... | 7 & 8 | 3,480 | 11,509 | 8,619 | 3,648 |
| I-B.—MAINTENANCE AND REPAIRS ... ... ... | 11 | 25,436 | 49,630 | 29,500 | 62,035 |
| II.—ESTABLISHMENT ... ... ... ... ... | 16 | 6,716 | 14,105 | 8,809 | 14,971 |
| III.—TOOLS AND PLANT ... ... ... ... ... | 18 | 368 | 335 | 572 | 900 |
| Total ... | | 36,000 | 75,579 | 47,500 | 81,554 |
| *Works for which neither Capital nor Revenue Accounts are kept.* | | | | | |
| WORKS ... ... ... ... ... ... ... | 7 & 8 | 4,03,883 | 2,58,830 | 2,09,807 | 2,36,430 |
| REPAIRS ... ... ... ... ... ... ... | 11 | 10,50,766 | 10,45,382 | 9,20,000 | 9,24,237 |
| ESTABLISHMENT ... ... ... ... ... ... | 16 | 4,70,636 | 4,29,191 | 1,76,256 | 3,00,721 |
| TOOLS AND PLANT ... ... ... ... ... | 18 | 15,715 | 35,338 | 11,397 | 15,930 |
| Total ... | | 19,41,000 | 17,68,741 | 13,17,460 | 15,67,318 |

# GOVERNMENT OF MADRAS.

ABSTRACT BUDGET ESTIMATE OF EXPENDITURE ON IRRIGATION AND NAVIGATION, AGRICULTURAL AND PROTECTIVE WORKS, IN THE MADRAS PRESIDENCY FOR THE YEAR FROM 1ST APRIL 1884 TO 31ST MARCH 1885—*cont.*

| | Reference to Detailed Estimate. | Budget Estimate, 1884-85. | Revised Estimate, 1883-84. | Budget Estimate, 1883-84. | Actual Outlay, 1882-83. |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| **H. EXPENDITURE ON PUBLIC WORKS NOT CLASSED AS PRODUCTIVE—continued.** | Page. | Rs. | Rs. | Rs. | Rs. |
| **44. IRRIGATION AND NAVIGATION—continued.** | | | | | |
| *Agricultural.* | | | | | |
| Works ... ... ... ... ... ... ... | 9 & 10 | 1,70,482 | 1,70,914 | 2,44,000 | 1,61,870 |
| Repairs ... ... ... ... ... ... ... | 11 | 1,50,000 | 1,84,300 | 1,50,000 | 2,04,193 |
| Establishment ... ... ... ... ... ... | 16 | 74,711 | 80,400 | 1,39,260 | 1,05,142 |
| Tools and Plant ... ... ... ... ... ... | 18 | 4,807 | 5,178 | 7,080 | 6,788 |
| Total ... | | 4,00,000 | 4,40,792 | 5,40,340 | 5,67,993 |
| *Totals.* | | | | | |
| Works ... ... ... ... ... ... ... | 7 to 10 | 5,77,845 | 4,44,542 | 5,21,060 | 3,09,076 |
| Repairs ... ... ... ... ... ... ... | 11 | 12,26,202 | 12,79,312 | 10,99,500 | 12,80,465 |
| Establishment ... ... ... ... ... ... | 16 | 5,52,063 | 5,23,696 | 3,37,812 | 4,87,328 |
| Tools and Plant ... ... ... ... ... | 18 | 20,890 | 40,851 | 19,928 | 21,976 |
| Grand Total ... | | 23,77,000 | 22,88,401 | 19,78,300 | 20,98,840 |
| PROVINCIAL. | | | | | |
| *Capital Account.* | | | | | |
| Works ... ... ... ... ... ... ... | 9 & 10 | 1,69,556 | 1,13,660 | 1,88,354 | 1,43,523 |
| Establishment ... ... ... ... ... ... | 16 | 73,499 | 56,733 | 43,321 | 29,701 |
| Tools and Plant ... ... ... ... ... | 18 | 500 | 13,500 | 2,825 | 1,936 |
| Total ... | | 2,43,555 | 1,83,893 | 2,34,500 | 1,75,160 |
| *Revenue Account.* | | | | | |
| Extensions and Improvements ... ... ... | 9 & 10 | 5,000 | 5,228 | 5,000 | 6,081 |
| Maintenance and Repairs ... ... ... ... | 11 | 77,659 | 1,31,875 | 77,410 | 1,24,321 |
| Establishment ... ... ... ... ... ... | 16 | 22,918 | 38,791 | 31,854 | 44,038 |
| Tools and Plant ... ... ... ... ... | 18 | 1,368 | 1,106 | 1,236 | 3,258 |
| Refunds of Revenue ... ... ... ... ... | | ... | ... | ... | 244 |
| Total ... | | 1,06,945 | 1,77,000 | 1,15,500 | 1,77,942 |
| *Totals.* | | | | | |
| Works ... ... ... ... ... ... ... | 9 & 10 | 1,74,556 | 1,18,888 | 1,93,354 | 1,49,604 |
| Repairs ... ... ... ... ... ... ... | 11 | 77,659 | 1,31,875 | 77,410 | 1,24,321 |
| Establishment ... ... ... ... ... ... | 16 | 96,417 | 95,524 | 75,175 | 73,739 |
| Tools and Plant ... ... ... ... ... | 18 | 1,868 | 14,606 | 4,061 | 5,194 |
| Refunds of Revenue ... ... ... ... ... | | ... | ... | ... | 244 |
| Total ... | | 3,50,500 | 3,60,893 | 3,50,000 | 3,53,102 |
| Grand Total ... | | 27,27,500 | 26,49,294 | 23,28,300 | 24,51,942 |
| **F. FAMINE RELIEF AND INSURANCE.** | | | | | |
| **34. PROTECTIVE WORKS—IRRIGATION.** | | | | | |
| Imperial. | | | | | |
| *Capital.* | | | | | |
| Works ... ... ... ... ... ... ... | 9 & 10 | 3,50,000 | 1,36,661 | 64,000 | 3,563 |
| Establishment ... ... ... ... ... ... | 16 | 46,000 | 39,208 | 1,23,500 | 57,943 |
| Tools and Plant ... ... ... ... ... | 18 | 3,000 | 3,322 | 12,500 | 2,747 |
| Total ... | | 3,99,000 | 1,79,191 | 2,00,000 | 64,253 |





# GOVERNMENT OF MADRAS.

PART I.

BUDGET ESTIMATE OF EXPENDITURE ON IRRIGATION AND NAVIGATION, AGRICULTURAL AND PROTECTIVE WORKS, IN THE MADRAS PRESIDENCY, FOR THE YEAR 1884-85, ARRANGED BY SYSTEMS.

| | Amount of Estimate. | Actual Outlay to end of 1882-83. | Revised Estimate, 1883-84. | Budget Estimate, 1883-84. | Budget Estimate, 1884-85. | Remarks and References. |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **H. EXPENDITURE ON PUBLIC WORKS NOT CLASSED AS PRODUCTIVE.** | Rs. | Rs. | Rs. | Rs. | Rs. | |
| **44. IRRIGATION AND NAVIGATION.** | | | | | | |
| Imperial. | | | | | | |
| *Works for which Capital and Revenue Accounts are kept.* | | | | | | |
| Capital. | | | | | | |
| *Works in progress.* | | | | | | |
| Pálár Anicut System ... ... | 13,19,498 | 15,92,004 | ... | 48,000 | ... | Completion estimates will be submitted shortly. |
| Pelandoral Anicut System ... | 3,65,588 | 3,53,542 | 3,289 | 25,000 | ... | Government of India Register No. 38 I. of 1877-78 and No. 7 I. of 1881-82, and Proceedings, Madras Government, No. 642 I., dated 16th August 1878. |
| Total ... | 16,85,086 | 19,45,546 | 3,289 | 73,000 | ... | |
| Revenue. | | | | | | |
| *Working Expenses and Maintenance.* | | | | | | |
| Chembrambakam Tank ... | ... | ... | 12,375 | 6,360 | — 1,000 | |
| Pálár Anicut System ... ... | ... | ... | 32,929 | 29,907 | 26,000 | |
| Pelandoral Anicut System ... | ... | ... | 30,275 | 11,233 | 11,000 | |
| Total ... | ... | ... | 75,579 | 47,500 | 36,000 | |
| Works for which neither Capital nor Revenue Accounts are kept. | ... | ... | 17,68,741 | 13,17,460 | 19,41,000 | |
| Agricultural Works ... ... | ... | ... | 4,40,792 | 5,40,340 | 4,00,000 | |
| Total, Imperial ... | ... | ... | 22,88,401 | 19,78,300 | 23,77,000 | |
| PROVINCIAL. | | | | | | |
| *Capital Account.* | | | | | | |
| Buckingham Canal ... ... | 86,12,000 | 48,92,525 | 1,40,973 | 1,96,500 | 2,20,000 | Government of India Register No. 15 I. of 1883-84. Proceedings of Madras Government, No. 625 I., dated 9th August 1883, and No. 195 I., dated 16th February 1884. |
| Madras Water-supply and Irrigation Extension Project. | 15,80,995 | 14,72,958 | 42,920 | 38,000 | 23,555 | Government of India Register No. 16 I. of 1883-84, and Proceedings of Madras Government, No. 307 I., dated 19th March 1884. |
| Total ... | 1,01,92,995 | 63,65,483 | 1,83,893 | 2,34,500 | 2,43,555 | |
| *Revenue Account.* | | | | | | |
| Buckingham Canal ... ... | ... | ... | 1,63,200 | 1,03,500 | 95,000 | |
| Madras Water-supply and Irrigation Extension Project. | ... | ... | 13,800 | 12,000 | 11,945 | |
| Total ... | ... | ... | 1,77,000 | 1,15,500 | 1,06,945 | |
| Total, Provincial ... | ... | ... | 3,60,893 | 3,50,000 | 3,50,500 | |

# GOVERNMENT OF MADRAS.

## PART I—continued.

BUDGET ESTIMATE OF EXPENDITURE ON IRRIGATION AND NAVIGATION, AGRICULTURAL AND PROTECTIVE WORKS, IN THE MADRAS PRESIDENCY, FOR THE YEAR 1884-85, ARRANGED BY SYSTEMS—*cont.*

| — | Amount of Estimate. | Actual Outlay to end of 1882-83. | Revised Estimate, 1883-84. | Budget Estimate, 1883-84. | Budget Estimate, 1884-85. | Remarks and References. |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **F. FAMINE RELIEF AND INSURANCE.** | Rs. | Rs. | Rs. | Rs. | Rs. | |
| **34. PROTECTIVE WORKS—IRRIGATION.** | | | | | | |
| *Imperial.* | | | | | | |
| Rushikulya Project ... ... | 26,01,386 | 6,270 | 3,000 | 84,000 | 2,49,000 | Government of India Register No. 16 I. of 1882-83. Proceedings of Madras Government, No. 147 T., dated 13th February 1883, and Proceedings of Madras Government, No. 500 I. of 23rd June 1883. |
| Hindupur and Roddam Project. | ... | 5,944 | ... | ... | ... | |
| Bellary Project ... ... | ... | 588 | ... | ... | ... | |
| Sugglair do. ... ... | ... | ... | ... | 33,000 | ... | |
| Peddapasupala tank ... ... | ... | ... | 8,026 | ... | ... | |
| Pálár Anicut Channels ... | ... | ... | 700 | ... | ... | |
| Barúr Tank Project ... ... | ... | 8,275 | 3,892 | ... | ... | |
| Marandahully Project ... ... | ... | 1,242 | 1,242 | ... | ... | |
| Calingaroyan Channel ... ... | ... | 1,664 | ... | ... | ... | |
| Krishnagiri Reservoir ... ... | ... | ... | 5,090 | ... | ... | |
| Vaniar Project ... ... ... | ... | 11,478 | 3,000 | ... | ... | |
| Lower Coleroon Project ... | ... | 11,930 | 2,988 | 15,000 | ... | |
| Bhaváni do. ... ... | ... | ... | ... | 2,000 | ... | |
| Periyár do. ... ... | ... | ... | 16,637 | 15,000 | ... | |
| Pápanásanam do. ... ... | ... | 5,391 | ... | ... | ... | |
| Buckingham Canal ... ... | ... | ... | ... | 18,000 | ... | |
| Ganjam-Gopálpur Tidal Canal. | ... | 48,581 | 1,33,000 | ... | 1,50,000 | |
| Canal from Sámalkót to Tuni .. | ... | 15,346 | 3,829 | 33,000 | ... | |
| | ... | ... | 271 | ... | ... | |
| Total ... | ... | 1,16,709 | 1,79,191 | 2,00,000 | 3,99,000 | |

## BUDGET ESTIMATE OF EXPENDITURE IN ENGLAND.

| — | Budget Estimate for 1884-85. | | | | Revised Estimate for 1883-84. | Budget Estimate, 1883-84. | Actual Outlay, 1882-83. | — |
|---|---|---|---|---|---|---|---|---|
| | Works. | Tools and Plant. | Suspense Account. | Total. | | | | |
| **H. EXPENDITURE ON PUBLIC WORKS NOT CLASSED AS PRODUCTIVE.** | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | |
| **44. Irrigation and Navigation.** | | | | | | | | |
| *Imperial.* | | | | | | | | |
| Irrigation and Navigation Works for which neither Capital nor Revenue Accounts are kept ... ... | ... | ... | ... | ... | 15,000 | 18,500 | 10,568 | |
| **PROVINCIAL.** | | | | | | | | |
| Buckingham Canal ... | ... | ... | ... | ... | 12,000 | ... | ... | |





# GOVERNMENT O

## PART II—

DETAIL OF BUDGET ESTIMATE FOR W

| Divisions. | Item No. | Details. | Amount of Estimate. | A. B. or C. Class. |
|---|---|---|---|---|
| | | **AGRICULTURAL WORKS.** | Rs. | |
| | | ORIGINAL WORKS. | | |
| | | River Embankments. | | |
| | | wtami Godá ari L. B., Rajahmundry to Yanam ... | 57,990 | B ... |
| | | dávari L. B.from Purushottapatam to Rajahmundry. | 1,25,110 | B ... |
| | | arrigeddavapo out-fall sluice ... ... ... | 26,380 | B ... |
| | | ssista Godávri L. B. to Gannaram aqueduct ... | 34,400 | B ... |
| | | wtami Godávari and Virdha Gowtami Godávari to Mokaltippa ... ... ... ... ... ... | 68,670 | B ... |
| Chingleput ... ... | 1 | averam Island embankment ... ... ... ... | 59,150 | B ... |
| | | ssista Godávri L. B. below Gunnaram aqueduct ... | 28,535 | B ... |
| | | nateyam Godávari R. B. improvements ... ... | 9,925 | B ... |
| | | Do. do. L. B. do. ... ... | 9,675 | B ... |
| South Arcot ... ... | 2 | dávari, R. B from Vijeshweram to Polaram ... | 1,48,730 | A ... |
| | | ssista Godávri, R. B. from anicut to Narsápur lock... | 65,200 | A ... |
| | | una river, L B. below anicut ... ... ... ... | 55,464 | B ... |
| | | aghni righ embankment above railway ... ... | 23,850 | B ... |
| | | rth or left embankment of Cheyár river ... ... | 12,557 | B ... |
| North Arcot ... ... | 3 | nbraparni ver, R. B., below Srivaikuntham anicut... | 83,598 | B ... |
| | | Do. L. B., do. do. to 7½ miles | 35,712 | B ... |
| | | Do. L. B., do. from 7½ miles to sea. | 47,872 | C ... |
| | | nor Origina Works ... ... ... ... ... | ... | B ... |
| | | Total ... | ... | ... |
| | | **PROVINCIAL.** | | |
| | | IRRIGATON AND NAVIGATION WORKS. | | |
| | | Capital Account. | | |
| Nellore ... ... | 4 | Zala kingham Canal ... ... ... ... ... | 68,24,843 | B ... |
| Do. ... ... | 5 | Zam dras WateSupply and Irrigation Extension Project. | 13,52,837 | B ... |
| Do. ... ... | 6 | Bog | | |
| Do ... ... | 7 | Bitra Total ... | ... | .. |
| Bellary ... ... | 8 | Book | | |
| Coimbatore ... ... | 9 | Chitr | | |
| Do. ... ... | 10 | Pulla | | |
| Do. ... .. | 11 | Kalin | | |
| South Arcot ... .. | 12 | Allan | | |
| | 13 | Allan | | |
| | 14 | Veyal | | |
| Do. ... ... | 15 | Cheng kingham anal ... ... ... ... ... | ... | B ... |
| Presidency ... ... | 16 | Mylap dras WateSupply and Irrigation Extension Project. | ... | C ... |
| Negapatam ... ... | 17 | Ollaca Total .. | ... | ... |
| Tinnevelly ... ... | 18 | Manur | | |
| Do. ... ... | 19 | Pallico **F. FAMIE RELIEF AND INSURANCE.** | | |
| Do. ... ... | 20 | Wattra | | |
| Do. ... .. | 21 | Papank PROTCTIVE WORKS IRRIGATION. | | |
| No. 1 Tank Division ... | 22 | Improv | | |
| No. 2 do. ... | 23 | IMPERIAL. | | |
| | 24 | Old mai Capital Account. | | |
| | | Reven | | |
| | 25 | Minor O hikulya loject ... ... ... ... ... | 20,76,654 | A ... |
| | | kingham anal ... ... ... ... ... | ... | ... |
| | | Total ... | | |

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# GOVERNMENT OF MADRAS.

## PART II.

DETAIL OF BUDGET ESTIMATES FOR WORKS FOR THE YEAR 1884-85.

| Divisions. | Item No. | Details. | Amount of Estimates. | A. B. or C. Class. | Outlay. To end of 1882-83. | Outlay. Probable during 1883-84. | Grant, 1884-85. | Item No. | Remarks and References. |
|---|---|---|---|---|---|---|---|---|---|
| | | | Rs. | Rs. | Rs. | Rs. | Rs. | | |
| | | **H. EXPENDITURE ON PUBLIC WORKS NOT CLASSED AS PRODUCTIVE.** | | | | | | | |
| | | **44. IRRIGATION AND NAVIGATION.** | | | | | | | |
| | | IMPERIAL. | | | | | | | |
| | | **Works for which Capital and Revenue Accounts are kept.** | | | | | | | |
| | | **CAPITAL.** | | | | | | | |
| | | *Nil.* | | | | | | | |
| | | **REVENUE.** | | | | | | | |
| | | **Extensions and Improvements.** | | | | | | | |
| Chingleput ... ... | 1 | Chembrambakam tank ... ... ... ... ... | ... | B ... | ... | 1,600 | 1,000 | 1 | For minor improvements which are for the most part within the Superintending Engineer's power of sanction. |
| | | | ... | ... | ... | 2,283 | 2,283 | | |
| | | Deduct old maintenance charges ... ... ... ... | ... | ... | ... | —683 | —1,283 | | |
| | | Net ... | ... | ... | ... | 8,429 | 1,000 | 2 | |
| South Arcot ... ... | 2 | Pelandurai Anicut System ... ... ... ... | ... | B ... | ... | 59 | 59 | | |
| | | Deduct old maintenance charges ... ... ... ... | ... | ... | ... | 4,000 | 4,000 | 3 | |
| | | Net ... | ... | ... | ... | 178 | 178 | | |
| North Arcot ... ... | 3 | Pálár Anicut System ... ... ... ... ... | ... | B ... | ... | 3,822 | 3,822 | | |
| | | Deduct old maintenance charges ... ... ... ... | ... | ... | ... | | 6,000 | | |
| | | Net ... | ... | ... | ... | ... | 2,520 | | |
| | | Total Revenue ... | ... | ... | ... | ... | 3,480 | | |
| | | Deduct old maintenance charges ... | ... | ... | ... | ... | | | |
| | | Net Revenue ... | ... | ... | ... | ... | | | |
| | | **Works for which neither Capital nor Revenue Accounts are kept.** | | | | | | | |
| Nellore ... ... | 4 | Zaladanki tank weirs ... ... ... ... ... | 3,485 | B ... | ... | ... | 2,750 | 4 | G.O., No. 270 I., dated 9th March 1883. |
| Do. ... ... | 5 | Zamunlapalem tank ... ... ... ... ... | 3,020 | B ... | ... | ... | 1,020 | 5 | G.O., No. 464 I., dated 4th June 1883. |
| Do. ... ... | 6 | Bogavalu tank ... ... ... ... ... ... | 5,654 | ... | ... | ... | 5,654 | 6 | G.O., No. 605 I., dated 3d August 1883. |
| Do ... ... | 7 | Bitragunta tank ... ... ... ... ... ... | 2,716 | ... | ... | ... | 1,716 | 7 | G.O., No. 427 I., dated 4th May 1883. |
| Bellary ... ... | 8 | Bookapatam tank improvements ... ... ... | 18,930 | B ... | 5,000 | 9,000 | 4,930 | 8 | G.O., No. 334 I., dated 7th April 1883. |
| Coimbatore ... ... | 9 | Chitrachavady channel improvements ... ... | 39,533 | B ... | 16,500 | 14,810 | 8,223 | 9 | G.O., No. 460 I., dated 4th June 1883. |
| Do. ... ... | 10 | Pullapollem channel improvements ... ... | 21,300 | B ... | ... | 5,000 | 10,300 | 10 | G.O., No. 225 I., dated 1st March 1883. |
| Do. ... ... | 11 | Kaliugarayen channel aqueduct ... ... ... | 6,560 | B ... | 1,500 | 4,790 | 1,870 | 11 | G.O., No. 606 I., dated 3d August 1883. |
| South Arcot ... ... | 12 | Allangal channel head-sluice ... ... ... | 9,250 | B ... | ... | 8,000 | 4,250 | 12 | G.O., No. 175 I., dated 2d February 1883. |
| | 13 | Allangal channel improvements ... ... ... | 7,946 | B ... | ... | ... | 4,887 | 13 | G.O., No. 468 I., dated 6th June 1883. |
| | 14 | Veyalore tank improvements ... ... ... | 5,440 | B ... | ... | ... | 2,940 | 14 | G.O., No. 286 I., dated 1st March 1883. |
| Do. ... ... | 15 | Chengam tank improvements ... ... ... | 6,521 | B ... | ... | 383 | 3,520 | 15 | G.O., No. 278 I., dated 1st March 1883. |
| Presidency ... ... | 16 | Mylapore tank improvements ... ... ... | 8,523 | B ... | ... | 4,900 | 3,523 | 16 | G.O., No. 237 I., dated 1st March 1883. |
| Negapatam ... ... | 17 | Ollacanum Terkuyeri tank improvements ... | 4,920 | B ... | ... | 3,000 | 1,920 | 17 | G.O., No. 160 I., dated 7th February 1883. |
| Tinnevelly ... ... | 18 | Manur channel improvements ... ... ... | 22,500 | B ... | ... | 14,132 | 7,068 | 18 | G.O., No. 378 I., dated 1 May 1883. |
| Do. ... ... | 19 | Pallicotai channel ... ... ... ... ... | 5,210 | B ... | ... | 1,743 | 5,210 | 19 | G.O., No. 617 I., dated 8 August 1883. |
| Do. ... ... | 20 | Wattrap Periyakolam improving surplus works ... | 5,685 | B ... | ... | 1,000 | 5,685 | 20 | G.O., No. 1008 I., dated 6th December 1883. |
| Do. ... ... | 21 | Papanasi channel head-sluice ... ... ... | 4,940 | B ... | ... | ... | 4,532 | 21 | G.O., No. 36 I., dated 7th January 1884. |
| No. 1 Tank Division ... | 22 | Improving tanks ... ... ... ... ... ... | ... | ... | ... | 12,000 | 75,000 | 22 | Lump sum provision. |
| No. 2 do. ... | 23 | Do. ... ... ... ... ... ... | ... | ... | ... | ... | 1,21,970 | 23. | Do. |
| | 24 | Old maintenance charges for works for which Capital and Revenue Accounts are kept. | ... | ... | ... | ... | 6,436 | 24 | |
| | 25 | Minor Original Works ... ... ... ... ... | ... | ... | ... | ... | 1,20,479 | 25 | |
| | | Total ... | ... | ... | ... | ... | 4,03,883 | | |

# GOVERNMENT OF MADRAS.

**PART II**—continued.

DETAIL OF BUDGET ESTIMATE FOR WORKS FOR THE YEAR 1884-85—*continued.*

| Divisions. | Item No. | Details. | Amount of Estimate. | A. B. or C. Class. | Outlay. To end of 1882-83. | Outlay. Probable during 1883-84. | Grant, 1884-85. | Item No. | Remarks and References. |
|---|---|---|---|---|---|---|---|---|---|
| | | **AGRICULTURAL WORKS.** | Rs. | | Rs. | Rs. | Rs. | | |
| | | ORIGINAL WORKS. | | | | | | | |
| | | River Embankments. | | | | | | | |
| Godávari Eastern ... | 26 | Gowtami Godávari L. B., Rajahmundry to Ynnam ... | 57,990 | B ... | 34,753 | 6,000 | 8,300 | 26 | G.O., No. 2675, of 27th September 1876. |
| Do. ... | 27 | Godávari L. B. from Purushottapatam to Rajahmundry. | 1,25,110 | B ... | 94,265 | 14,000 | 10,000 | 27 | G.O., No. 708, of 18th March 1876. |
| Do. ... | 28 | Tharrigeddavapo out-fall sluice ... ... ... | 26,380 | B ... | ... | 10,000 | 12,000 | 28 | G.O., No. 856 I., of 24th October 1882. |
| Godávari Central ... | 29 | Vassista Godávari L. B. to Gannaram aqueduct ... | 34,400 | B ... | 22,513 | 3,000 | 5,000 | 29 | G.O., No. 3373, of 12th December 1876. |
| Do. ... | 30 | Gowtami Godávari and Virdha Gowtami Godávari to Mokaltippa ... ... ... ... ... | 68,670 | B ... | 30,375 | 9,000 | 5,000 | 30 | G.O., No. 346 I., of 25th September 1877. |
| Do. ... | 31 | Pravoram Island embankment ... ... ... ... | 59,150 | B ... | 44,563 | 3,000 | 3,000 | 31 | G.O., No. 95 I., of 22nd January 1877. |
| Do. ... | 32 | Vassista Godávari L. B. below Gunnaram aqueduct ... | 28,535 | B ... | 4,237 | 5,000 | 3,000 | 32 | G.O., No. 349 I., of 27th September 1877. |
| Do. ... | 33 | Vynateyam Godávari R. B. improvements ... ... | 9,925 | B ... | ... | ... | 3,000 | 33 | } G.O., No. 618 I., dated 22nd November 1877. |
| Do. ... | 34 | Do. to. L. B. do. ... ... | 9,675 | B ... | ... | ... | 3,000 | 34 | |
| Godávari Western .. | 35 | Godávari, R. B. from Vijeshweram to Polaram ... | 1,48,730 | A ... | 1,14,131 | 10,000 | 23,200 | 35 | G.O., No. 1998 I., of 4th August 1876. |
| Do. ... | 36 | Vassista Godávari, R. B. from anicut to Narsápur lock... | 65,200 | A ... | 65,745 | 1,700 | 775 | 36 | G.O., No. 713 I., of 6th December 1879. |
| Kistna Eastern ... | 37 | Kistna river, L B. below anicut ... ... ... ... | 55,464 | B ... | 37,942 | 12,000 | 10,000 | 37 | G.O., No. 814 I., of 13th October 1882. |
| Cuddapah ... ... | 38 | Do. L. B. do. ... ... ... ... | 17,740 | B ... | 4,557 | 2,000 | 6,207 | 38 | G.O., No. 361 I., of 4th April 1883. |
| Do. ... ... | 39 | Pinaghni right embankment above railway ... ... | 23,850 | B ... | ... | ... | 10,000 | 39 | G.O., No. 634 I., of 11th August 1883. |
| Do. ... ... | 40 | North or left embankment of Cheyár river ... ... | 12,557 | B ... | ... | ... | 10,000 | 40 | G.O., No. 665 I., of 20th " " |
| Tinnevelly ... ... | 41 | Tambraparni river, R. B., below Srivaikuntham anicut... | 84,598 | B ... | 24,832 | 11,105 | 20,000 | 41 | } G.O., No. 351 I., of 26th April 1883. |
| | 42 | Do. L. B., do. do. to 7½ miles | 35,712 | B ... | ... | ... | 20,000 | 42 | |
| | 43 | Do. L. B., do. from 7½ miles to sea. | 47,872 | C ... | ... | 13,200 | ... | 43 | G.O., No. 996 I., of 4th December 1882. |
| Do. ... ... | 44 | Minor Origina Works ... ... ... ... ... | ... | B ... | ... | ... | 18,000 | 44 | |
| | | Total ... | ... | ... | ... | ... | 1,70,482 | | |
| | | **PROVINCIAL.** | | | | | | | |
| | | IRRIGATON AND NAVIGATION WORKS. | | | | | | | |
| | | Capital Account. | | | | | | | |
| Buckingham Canal ... | 45 | Buckingham anal ... ... ... ... ... | 68,21,843 | B ... | 52,12051 | 78,766 | 1,50,406 | 45 a | G.O., No. 841 W., dated 14th March 1883. Government of India register No. 15 I., of 1883-84. Proceedings of Madras Government, No. 195 I., dated 16th February 1884. Government of India register No. 16 I., of 1883-84, Proceedings of Madras Government, No. 307 I., dated 19th March 1884. |
| Chingleput ... | 46 | Madras WateSupply and Irrigation Extension Project. | 13,52,837 | B ... | 12,2,895 | 34,894 | 19,150 | 46 | |
| | | Total ... | ... | ... | ... | ... | 1,69,556 | | |
| | | Revenue Account. | | | | | | | |
| | | Extensions and Improvements. | | | | | | | |
| Buckingham Canal ... | 47 | Buckingham anal ... ... ... ... ... | ... | B ... | | 5,000 | 5,000 | 47 | } For minor improvements which are for the most part within the Superintending Engineer's power of sanction. |
| Chingleput ... | 48 | Madras WateSupply and Irrigation Extension Project. | ... | C ... | | 228 | ... | 48 | |
| | | Total .. | ... | ... | | ... | 5,000 | | |
| | | **F. FAMIE RELIEF AND INSURANCE.** | | | | | | | |
| | | PROTCTIVE WORKS IRRIGATION. | | | | | | | |
| | | IMPERIAL. | | | | | | | |
| | | Capital Account. | | | | | | | |
| Rushkulia Project Division | 49 | Rushikulya oject ... ... ... ... ... | 20,76,651 | A ... | | ... | 2,00,000 | 49 | G.O., No. 147 I., dated 13th February 1885, and G.O. No. 500 I., dated 23rd June 1885. Government of India register No. 3 I. of 1883-84. |
| Buckingham Canal ... | 50 | Buckingham anal ... ... ... ... ... | ... | ... | | 1,33,000 | 1,50,000 | 50 | Grant-in-aid in addition to the allotment from Provincial Funds Budget Item No. 45. |
| | | Total ... | | | | ... | 3,50,000 | | |



# GOVERNMENT OF MADRAS.

**PART II**—continued.

GENERAL ABSTRACT OF THE GRANT PROVIDED FOR IN THE PRECEDING ESTIMATE.

| | Imperial Funds. In India. | Imperial Funds. In England. | Imperial Funds. Total. | Contribution. | Provincial Funds. | Total. |
|---|---|---|---|---|---|---|
| | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| **H. EXPENDITURE ON PUBLIC WORKS NOT CLASSED AS PRODUCTIVE.** | | | | | | |
| **44. IRRIGATION AND NAVIGATION—IMPERIAL.** | | | | | | |
| IRRIGATION AND NAVIGATION WORKS—REVENUE. | | | | | | |
| Chembrambakam Tank ... ... ... ... ... | —1,283 | ... | —1,283 | ... | ... | —1,283 |
| Pálár Anicut System ... ... ... ... ... | 3,822 | ... | 3,822 | ... | ... | 3,822 |
| Pelandorai Anicut System ... ... ... ... ... | 941 | ... | 941 | ... | ... | 941 |
| Total ... | 3,480 | ... | 3,480 | ... | ... | 3,480 |
| IRRIGATION AND NAVIGATION WORKS FOR WHICH NEITHER CAPITAL NOR REVENUE ACCOUNTS ARE KEPT. | | | | | | |
| Major Works ... ... ... ... ... ... | 79,998 | ... | 79,998 | ... | ... | 79,998 |
| Minor Works ... ... ... ... ... ... | 1,20,479 | ... | 1,20,479 | ... | ... | 1,20,479 |
| Lump sum provision for expenditure in the Tank divisions ... ... ... ... ... ... | 1,96,970 | ... | 1,96,970 | ... | ... | 1,96,970 |
| Old maintenance charges for works for which Capital and Revenue Accounts are kept ... ... ... ... | 6,436 | ... | 6,436 | ... | ... | 6,436 |
| Total ... | 4,03,883 | ... | 4,03,883 | ... | ... | 4,03,883 |
| AGRICULTURAL WORKS. | | | | | | |
| Major Works ... ... ... ... ... ... | 1,52,482 | ... | 1,52,482 | ... | ... | 1,52,482 |
| Minor Works ... ... ... ... ... ... | 18,000 | ... | 18,000 | ... | ... | 18,000 |
| Total ... | 1,70,482 | ... | 1,70,482 | ... | ... | 1,70,482 |
| Total, Imperial ... | 5,77,845 | ... | 5,77,845 | ... | ... | 5,77,845 |

# GOVERNMENT OF MADRAS.

## PART II—continued.

GENERAL ABSTRACT OF THE GRANT PROVIDED FOR IN THE PRECEDING ESTIMATE.

| | Imperial Funds. | | | Contribution. | Provincial Funds. | Total. |
|---|---|---|---|---|---|---|
| | In India. | In England. | Total. | | | |
| **H. EXPENDITURE ON PUBLIC WORKS NOT CLASSED AS PRODUCTIVE**—continued. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| **44. IRRIGATION AND NAVIGATION**—continued. | | | | | | |
| **PROVINCIAL.** | | | | | | |
| **IRRIGATION AND NAVIGATION WORKS CAPITAL ACCOUNT.** | | | | | | |
| Buckingham Canal ... ... ... ... ... ... | ... | ... | ... | ... | 1,50,406 | 1,50,406 |
| Madras Water Supply and Irrigation Extension Project ... | ... | ... | ... | ... | 19,150 | 19,150 |
| Total ... | ... | ... | ... | ... | 1,69,556 | 1,69,556 |
| **REVENUE ACCOUNT.** | | | | | | |
| Buckingham Canal ... ... ... ... ... ... | ... | ... | ... | ... | 5,000 | 5,000 |
| Total ... | ... | ... | ... | ... | 5,000 | 5,000 |
| **F. FAMINE RELIEF AND INSURANCE.** | | | | | | |
| **34. PROTECTIVE WORKS—IRRIGATION.** | | | | | | |
| Imperial. | | | | | | |
| **CAPITAL ACCOUNT.** | | | | | | |
| Rushikulya Project ... ... ... ... ... | ... | ... | ... | ... | ... | 2,00,000 |
| Minor Original Works ... ... ... ... ... | 2,00,000 | ... | 2,00,000 | ... | ... | 1,50,000 |
| | 1,50,000 | ... | 1,50,000 | ... | ... | |
| Total ... | 3,50,000 | ... | 3,50,000 | ... | ... | 3,50,000 |





# GOVERNMENT OF MADRAS.

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## PART III.

DETAIL OF THE BUDGET ESTIMATE FOR MAINTENANCE AND REPAIRS OF IRRIGATION WORKS FOR THE YEAR 1884-85.

| | Estimate, 1884-85. | | Estimate, 1883-84. | |
|---|---|---|---|---|
| | Amount. | Total. | Amount. | Total. |
| **H. EXPENDITURE ON PUBLIC WORKS NOT CLASSED AS PRODUCTIVE.** | Rs. | Rs. | Rs. | Rs. |
| **44. IRRIGATION AND NAVIGATION—IMPERIAL** | | | | |
| **MAINTENANCE AND REPAIRS.** | | | | |
| Chembrambakam Tank— | 3,500 | | 3,500 | |
| Chingleput division ... ... ... ... ... ... | 3,097 | | 3,097 | |
| Deduct old maintenance charges ... ... ... | ... | 403 | ... | 403 |
| Pálár Anicut System— | | | | |
| Northern Section— | 3,000 | | 3,000 | |
| Kávéripak channel ... ... ... ... ... ... | 4,000 | | 4,000 | |
| Do. Tank supply channel ... ... ... ... ... | 3,000 | | 3,000 | |
| Mahindravadi channel ... ... ... ... ... ... | 5,000 | | 5,000 | |
| Govindavadi channel ... ... ... ... ... ... | | | | |
| Southern Section— | 2,500 | | 2,500 | |
| Dusi channel ... ... ... ... ... ... ... | 2,500 | | 2,500 | |
| Chuckramallur channel ... ... ... ... ... ... | | | | |
| | 20,000 | | 20,000 | |
| | 2,909 | | 2,909 | |
| Deduct old maintenance charges ... ... ... ... | ... | 17,091 | ... | 17,091 |
| Pelandorai Anicut System— | 8,000 | | 6,000 | |
| South Arcot division ... ... ... ... ... ... | 58 | | 58 | |
| Deduct old maintenance charges ... ... ... ... | ... | 7,942 | ... | 5,942 |
| Total ... | ... | 25,436 | ... | 23,336 |
| Irrigation and Navigation Works for which neither Capital nor Revenue Accounts are kept ... ... ... ... ... | 5,50,000 | | 5,50,000 | |
| Old Maintenance Charges ... ... ... ... ... | 1,30,766 | | 1,30,766 | |
| Repairs to Minor Irrigation Works ... ... ... ... | 3,70,000 | | 3,70,000 | |
| | | 10,50,766 | | 10,50,766 |
| Agricultural Works— | 64,000 | | 67,155 | |
| River Conservancy ... ... ... ... ... ... | 80,000 | | 80,845 | |
| River Embankments ... ... ... ... ... ... | 1,000 | | ... | |
| Drainages ... ... ... ... ... ... ... | ... | | 2,000 | |
| Miscellaneous ... ... ... ... ... ... ... | 5,000 | | ... | |
| Reserve ... ... ... | | 1,50,000 | | 1,50,000 |
| Total, Imperial ... | ... | 12,26,202 | ... | 12,24,102 |
| **PROVINCIAL.** | | | | |
| Maintenance and Repairs— | 6,710 | | 6,710 | |
| Maintenance of Buckingham canal— | 56,925 | | 56,925 | |
| 61 miles at Rs. 110 per mile ... ... ... ... ... | 5,000 | | 5,100 | |
| 207 „ at Rs. 275 „ ... ... ... ... ... | | 68,635 | | 68,735 |
| Repairs to masonry works ... ... ... ... ... | 9,024 | | 8,675 | |
| Maintenance of the Madras Water Supply and Irrigation Extension Project Works ... ... ... ... ... ... ... | | 9,024 | | 8,675 |
| Total, Provincial ... | ... | 77,659 | ... | 77,410 |

# GOVERNMENT OF MADRAS.

## PART II—continued.

GENERAL ABSTRACT OF THE GRANT PROVIDED FOR IN THE PRECEDING ESTIMATE.

| | Imperial Funds. | | | Contribution. | Provincial Funds. | Total. |
|---|---|---|---|---|---|---|
| | In India. | In England. | Total. | | | |
| **H. EXPENDITURE ON PUBLIC WORKS NOT CLASSED AS PRODUCTIVE**—continued. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| **44. IRRIGATION AND NAVIGATION**—continued. | | | | | | |
| **PROVINCIAL.** | | | | | | |
| **IRRIGATION AND NAVIGATION WORKS CAPITAL ACCOUNT.** | | | | | | |
| Buckingham Canal ... ... ... ... ... ... | ... | ... | ... | ... | 1,50,406 | 1,50,406 |
| Madras Water Supply and Irrigation Extension Project ... | ... | ... | ... | ... | 19,150 | 19,150 |
| Total ... | ... | ... | ... | ... | 1,69,556 | 1,69,556 |
| **REVENUE ACCOUNT.** | | | | | | |
| Buckingham Canal ... ... ... ... ... ... | ... | ... | ... | ... | 5,000 | 5,000 |
| Total ... | ... | ... | ... | ... | 5,000 | 5,000 |
| **F. FAMINE RELIEF AND INSURANCE.** | | | | | | |
| **34. PROTECTIVE WORKS—IRRIGATION.** | | | | | | |
| **Imperial.** | | | | | | |
| **CAPITAL ACCOUNT.** | | | | | | |
| Rushikulya Project ... ... ... ... ... ... | 2,00,000 | ... | 2,00,000 | ... | ... | 2,00,000 |
| Minor Original Works ... ... ... ... ... | 1,50,000 | ... | 1,50,000 | ... | ... | 1,50,000 |
| Total ... | 3,50,000 | ... | 3,50,000 | ... | ... | 3,50,000 |





# GOVERNMENT OF MADRAS.

## PART III.

DETAIL OF THE BUDGET ESTIMATE FOR MAINTENANCE AND REPAIRS OF IRRIGATION WORKS FOR THE YEAR 1884-85.

| | Estimate, 1884-85. | | Estimate, 1883-84. | |
|---|---|---|---|---|
| | Amount. | Total. | Amount. | Total. |
| **H. EXPENDITURE ON PUBLIC WORKS NOT CLASSED AS PRODUCTIVE.** | Rs. | Rs. | Rs. | Rs. |
| **44. IRRIGATION AND NAVIGATION—IMPERIAL** | | | | |
| **MAINTENANCE AND REPAIRS.** | | | | |
| Chembrambakam Tank— | | | | |
| Chingleput division ... ... ... ... ... ... | 3,500 | | 3,500 | |
| Deduct old maintenance charges ... ... ... ... | 3,097 | | 3,097 | |
| | ... | 403 | ... | 403 |
| Pálár Anicut System— | | | | |
| Northern Section— | | | | |
| Káveripak channel ... ... ... ... ... ... | 3,000 | | 3,000 | |
| Do. Tank supply channel ... ... ... ... ... | 4,000 | | 4,000 | |
| Mahindravadi channel ... ... ... ... ... ... | 3,000 | | 3,000 | |
| Govindavadi channel ... ... ... ... ... ... | 5,000 | | 5,000 | |
| Southern Section— | | | | |
| Dusi channel ... ... ... ... ... ... ... | 2,500 | | 2,500 | |
| Chuckramallur channel ... ... ... ... ... ... | 20,000 | | 20,000 | |
| | 2,909 | | 2,909 | |
| Deduct old maintenance charges ... ... ... ... | ... | 17,091 | ... | 17,091 |
| Pelandorai Anicut System— | | | | |
| South Arcot division ... ... ... ... ... ... | 8,000 | | 6,000 | |
| Deduct old maintenance charges ... ... ... ... | 58 | | 58 | |
| | ... | 7,942 | ... | 5,942 |
| Total ... | ... | 25,436 | ... | 23,336 |
| Irrigation and Navigation Works for which neither Capital nor Revenue Accounts are kept ... ... ... ... ... | 5,50,000 | | 5,50,000 | |
| Old Maintenance Charges ... ... ... ... ... | 1,30,766 | | 1,30,766 | |
| Repairs to Minor Irrigation Works ... ... ... ... | 3,70,000 | 10,50,766 | 3,70,000 | 10,50,766 |
| Agricultural Works— | | | | |
| River Conservancy ... ... ... ... ... ... | 64,000 | | 67,155 | |
| River Embankments ... ... ... ... ... ... | 80,000 | | 80,845 | |
| Drainages ... ... ... ... ... ... ... | 1,000 | | ... | |
| Miscellaneous ... ... ... ... ... ... ... | ... | | 2,000 | |
| Reserve ... ... ... ... ... ... ... | 5,000 | 1,50,000 | ... | 1,50,000 |
| Total, Imperial ... | ... | 12,26,202 | ... | 12,24,102 |
| **PROVINCIAL.** | | | | |
| Maintenance and Repairs— | | | | |
| Maintenance of Buckingham canal— | | | | |
| 61 miles at Rs. 110 per mile ... ... ... ... ... | 6,710 | | 6,710 | |
| 207 „ at Rs. 275 „ ... ... ... ... ... | 56,925 | | 56,925 | |
| Repairs to masonry works ... ... ... ... ... | 5,000 | 68,635 | 5,100 | 68,735 |
| Maintenance of the Madras Water Supply and Irrigation Extension Project Works ... ... ... ... ... ... ... | 9,024 | 9,024 | 8,675 | 8,675 |
| Total, Provincial ... | ... | 77,659 | ... | 77,410 |

# GOVERNMENT OF MADRAS.

## PART III—continued.

GENERAL ABSTRACT OF THE GRANTS PROVIDED FOR IN THE PRECEDING ESTIMATE.

| | Imperial Funds. | | | Contribution. | Provincial Funds. | Total. |
|---|---|---|---|---|---|---|
| | In India. | In England. | Total. | | | |
| **H. EXPENDITURE ON PUBLIC WORKS NOT CLASSED AS PRODUCTIVE.** | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| **44. IRRIGATION AND NAVIGATION—IMPERIAL.** | | | | | | |
| Revenue. | | | | | | |
| Chembrambakam Tank ... ... ... | 403 | ... | 403 | ... | ... | 403 |
| Pelandorai Anicut System ... ... ... | 7,942 | ... | 7,942 | ... | ... | 7,942 |
| Pálár Anicut System ... ... ... | 17,091 | ... | 17,091 | ... | ... | 17,091 |
| Total ... | 25,436 | ... | 25,436 | ... | ... | 25,436 |
| Irrigation and Navigation Works for which neither Capital nor Revenue Accounts are kept ... ... ... ... | 10,50,766 | ... | 10,50,766 | ... | ... | 10,50,766 |
| Agricultural Works— | | | | | | |
| River conservancy ... ... ... | 64,000 | ... | 64,000 | ... | ... | 64,000 |
| River embankments ... ... ... | 80,000 | ... | 80,000 | ... | ... | 80,000 |
| Drainages ... ... ... ... | 1,000 | ... | 1,000 | ... | ... | 1,000 |
| Miscellaneous ... ... ... ... | ... | ... | ... | ... | ... | ... |
| Reserve ... ... ... ... ... | 5,000 | ... | 5,000 | ... | ... | 5,000 |
| Total ... | 1,50,000 | ... | 1,50,000 | ... | ... | 1,50,000 |
| Total, Imperial ... | 12,26,202 | ... | 12,26,202 | ... | ... | 12,26,202 |
| PROVINCIAL. | | | | | | |
| Buckingham Canal ... ... ... | ... | ... | ... | .... | 68,635 | 68,635 |
| Madras Water Supply and Irrigation Extension Project Works ... ... | ... | ... | ... | ... | 9,024 | 9,024 |
| Total, Provincial ... | ... | ... | ... | ... | 77,659 | 77,659 |





# GOVERNMENT OF MADRAS.

## PART IV.

DETAIL OF THE BUDGET ESTIMATE OF ESTABLISHMENT CHARGES FOR THE YEAR 1884-85.

| Number. | | Particulars. | Rate of Salary. | Budget Estimate for 1884-85. | | | Revised Estimate for 1883-84. |
|---|---|---|---|---|---|---|---|
| 1883-84. | 1884-85. | | | Per Mensem. | Per Annum. | Total. | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | IMPERIAL. | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | **H. EXPENDITURE ON PUBLIC WORKS NOT CLASSED AS PRODUCTIVE.** | | | | | |
| | | **44. IRRIGATION AND NAVIGATION.** | | | | | |
| | | Total Grant for Works and Repairs ... ... | ... | ... | ... | 18,04,047 | 17,23,854 |
| | | *Deduct items on which no Establishment charge is admissible—* | | | | | |
| | | Grant for Land Compensation ... ... ... | ... | ... | ... | ... | 13,289 |
| | | Grant for Expenditure in the Tank Division, in which the cost of actual Establishment employed is debited to Irrigation ... ... | ... | ... | ... | 1,96,970 | 12,000 |
| | | Grant for Repairs to Minor Irrigation Works under the charge of Collectors ... ... | ... | ... | ... | 3,70,000 | 3,70,000 |
| | | Total Deductions ... | ... | ... | ... | 5,66,970 | 3,95,289 |
| | | Net Grant for Works and Repairs ... | ... | ... | ... | 12,37,077 | 13,28,565 |
| | | A. Contribution to Provincial Funds on account of Establishment at 23 per cent. on the grant for Works and Repairs ... ... ... ... | ... | ... | ... | 2,84,528 | 3,05,581 |
| | | Estimate of Direct Revenue ... | ... | ... | ... | 22,650 | 22,420 |
| | | B. Contribution to Provincial Funds at 10 per cent. of the estimate of Direct Revenue ... | ... | ... | ... | 2,265 | 2,242 |
| | | Revenue due to old Irrigation under Productive Public Works ... ... ... ... | ... | ... | ... | 27,44,000 | 27,44,000 |
| | | C. 6 per cent. on revenue due to old irrigation ... ... ... ... ... | ... | ... | ... | 1,64,640 | 1,64,640 |
| | | Total A + B + C ... | ... | ... | ... | 4,51,433 | 4,72,441 |
| | | *Special Establishment for improving Tanks.* | | | | | |
| 1 | 1 | Superintending Engineer, 3rd Grade ... ... | 1,593½ | 1,593½ | | | |
| 1 | 1 | Executive Engineer, 3rd Grade ... ... ... | 650 | 650 | | | |
| | | Total ... | ... | 2,243½ | | | |
| | | *Office Establishment.* | | | | | |
| 1 | 1 | Clerk, 2nd Class, 1st Grade ... ... ... | 180 | 180 | | | |
| 1 | 1 | Do. 3rd do. 3rd do. ... ... ... | 55 | 55 | | | |
| 1 | 1 | Do. 4th do. 2nd do. ... ... ... | 35 | 35 | | | |
| 1 | 1 | Do. 4th do. 3rd do. ... ... ... | 25 | 25 | | | |
| 1 | 1 | Draughtsman, Special ... ... ... ... | 90 | 90 | | | |
| 1 | 1 | Do. 1st Class ... ... ... ... | 60 | 60 | | | |
| 2 | 2 | Do. 2nd Class ... ... ... ... | 42½ | 85 | | | |
| 1 | 1 | Moochee ... ... ... ... ... ... | 8 | 8 | | | |

# GOVERNMENT OF MADRAS.

**PART IV**—continued.

DETAIL OF THE BUDGET ESTIMATE OF ESTABLISHMENT CHARGES FOR THE YEAR 1884-85—*continued.*

| Number. 1883-84. | Number. 1884-85. | Particulars. | Rate of Salary. | Budget Estimate for 1884-85. Per Mensem. | Per Annum. | Total. | Revised Estimate for 1883-84. |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | IMPERIAL—continued. | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | **H. EXPENDITURE ON PUBLIC WORKS NOT CLASSED AS PRODUCTIVE**—continued. | | | | | |
| | | **44. IRRIGATION AND NAVIGATION**—continued. | | | | | |
| | | Imperial—continued. | | | | | |
| | | *Office Establishment*—cont. | | | | | |
| 3 | 3 | Messengers ... ... ... ... ... | 6 | 18 | | | |
| 3 | 3 | Lascars ... ... ... ... ... ... | 6 | 18 | | | |
| | | Total, Office Establishment ... | ... | 574 | | | |
| | | Total ... | ... | 2,817½ | 33,810 | | |
| | | Travelling Allowance ... ... ... ... | ... | ... | 1,620 | | |
| | | Contingencies ... ... ... ... ... | ... | ... | 1,200 | | |
| | | | | | | 36,630 | |
| | | *Establishment for No. 1 Tank Division.* | | | | | |
| 1 | 1 | Executive Engineer, 3rd Grade ... ... ... | 650 | 650 | | | |
| 1 | 1 | Assistant Engineer, 1st do. ... ... ... | 450 | 450 | | | |
| 1 | 1 | Sub-Engineer, 2nd do. ... ... ... | 300 | 300 | | | |
| 1 | 1 | Supervisor, 2nd do. ... ... ... | 150 | 150 | | | |
| 4 | 4 | Overseers, 2nd do. ... ... ... | 80 | 320 | | | |
| | | | ... | 1,870 | | | |
| | | *Office Establishment.* | | | | | |
| 1 | 1 | Clerk, 3rd Class, 2nd Grade ... ... ... | 70 | 70 | | | |
| 1 | 1 | Do. 4th do. 1st do. ... ... ... | 45 | 45 | | | |
| 1 | 1 | Do. 4th do. 2nd do. ... ... ... | 35 | 35 | | | |
| 2 | 2 | Clerks, 4th do. 3rd do. ... ... ... | 25 | 50 | | | |
| 1 | 1 | Draughtsman, 1st Class ... ... ... | 60 | 60 | | | |
| 1 | 1 | Do. 3rd do. ... ... ... | 25 | 25 | | | |
| 1 | 1 | Messenger ... ... ... ... ... ... | 7 | 7 | | | |
| 1 | 1 | Do. ... ... ... ... ... ... | 6 | 6 | | | |
| 3 | 3 | Lascars ... ... ... ... ... ... | 6 | 18 | | | |
| | | | ... | 316 | | | |
| | | *Sub-Divisional Office Establishment.* | | | | | |
| 3 | 3 | Clerks, 4th Class, 3rd Grade ... ... ... | 25 | 75 | | | |
| 3 | 3 | Messengers ... ... ... ... ... | 6 | 18 | | | |
| | | | | 93 | | | |
| | | Total No. 1 Tank Division ... | ... | 2,279 | 27,348 | | |
| | | Travelling Allowance ... ... ... ... | ... | ... | 3,452 | | |
| | | Contingencies ... ... ... ... ... | ... | ... | 1,200 | | |
| | | | | | | 32,000 | |
| | | No. 2 Tank Division as above ... ... ... | ... | ... | ... | 32,000 | |
| | | Total ... | ... | ... | ... | 1,00,630 | 51,255 |
| | | Total II. Expenditure on Public Works not classed as Productive ... | ... | ... | ... | 5,52,063 | 5,23,696 |





# GOVERNMENT OF MADRAS.

**PART IV**—continued.

DETAIL OF THE BUDGET ESTIMATE OF ESTABLISHMENT CHARGES FOR THE YEAR 1884-85—*continued.*

| Number. 1883-84. | Number. 1884-85. | Particulars. | Rate of Salary. | Budget Estimate for 1884-85. Per Mensem. | Per Annum. | Total. | Revised Estimate for 1883-84. |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | **F. FAMINE RELIEF AND INSURANCE.** | | | | | |
| | | **34. PROTECTIVE WORKS—IRRIGATION.** | | | | | |
| | | Total Grant for Works ... ... ... ... | ... | ... | ... | 3,50,000 | 1,36,661 |
| | | *Deduct items on which no charge for Establishment is admissible.* | | | | | |
| | | Compensation for land ... ... ... | ... | ... | ... | ... | ... |
| | | Grant for expenditure in the Project Divisions in which the cost of Establishment employed is debited to Irrigation ... ... ... ... | ... | ... | ... | ... | 3,661 |
| | | Grant-in-aid for the Buckingham Canal ... ... | ... | ... | ... | 1,50,000 | 1,33,000 |
| | | Total Deductions ... | ... | ... | ... | 1,50,000 | 1,36,661 |
| | | Net Grant ... | ... | ... | ... | 2,00,000 | ... |
| | | Contribution to Provincial Funds at 23 per cent. on the net Grant ... ... ... ... | ... | ... | ... | 46,000 | ... |
| | | Establishment in the Project Divisions ... ... | ... | ... | ... | ... | 39,208 |
| | | Total ... | ... | ... | ... | 46,000 | 39,208 |
| | | **PROVINCIAL.** | | | | | |
| | | **H. EXPENDITURE ON PUBLIC WORKS NOT CLASSED AS PRODUCTIVE.** | | | | | |
| | | **44. IRRIGATION AND NAVIGATION.** | | | | | |
| | | Grant for Works and Repairs ... ... ... | ... | ... | ... | 2,52,215 | 2,50,763 |
| | | Share of the Public Works Establishment charges at 23 per cent. on the grant for Works and Repairs ... ... ... ... ... | ... | ... | ... | 58,011 | 57,676 |
| | | Estimate of Direct Revenue ... ... ... | ... | ... | ... | 39,060 | 72,580 |
| | | Share of the Public Works Establishment charges at 10 per cent. on Direct Revenue ... ... | ... | ... | ... | 3,906 | 7,258 |
| | | Share of the Public Works Establishment charges at 23 per cent. on the grant-in-aid from F. Famine Relief and Insurance Funds ... ... | ... | ... | ... | 34,500 | 30,590 |
| | | Total, Establishment Charges ... | ... | ... | ... | 96,417 | 95,524 |

# GOVERNMENT OF MADRAS.

## PART V.

DETAIL OF ESTIMATED CHARGES FOR ESTABLISHMENT BY SYSTEMS OF CANALS FOR 1884-85.

| — | Percentage on the Grant for Works and Repairs. | | Percentage on the Direct Revenue. | | Percentage on the Indirect Revenue. | | Cost of Establishment Actually Employed. | Total Charges for Establishment. |
|---|---|---|---|---|---|---|---|---|
| | Grant for Works and Repairs. | 23 per cent. | Direct Revenue. | 10 per cent. | Indirect Revenue. | 6 per cent. | | |
| **H. EXPENDITURE ON PUBLIC WORKS NOT CLASSED AS PRODUCTIVE.** | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| **44. IRRIGATION AND NAVIGATION—IMPERIAL.** | | | | | | | | |
| Works for which Capital and Revenue Accounts are kept. | | | | | | | | |
| CAPITAL ACCOUNT. | | | | | | | | |
| Nil. | | | | | | | | |
| REVENUE ACCOUNT. | | | | | | | | |
| Chembrambakam Tank ... ... | — 880 | — 202 | 50 | 5 | ... | ... | ... | — 197 |
| Pálár Anicut System ... ... | 20,913 | 4,810 | 550 | 55 | ... | ... | ... | 4,865 |
| Pelandorai Anicut System ... ... | 8,883 | 2,043 | 50 | 5 | ... | ... | ... | 2,048 |
| Total ... | 28,916 | 6,651 | 650 | 65 | ... | ... | ... | 6,716 |
| Irrigation and Navigation Works for which neither Capital nor Revenue Accounts are kept ... ... ... | 7,50,477 | 1,72,610 | 12,000 | 1,200 | ... | ... | ... | 1,73,810 |
| Old Maintenance Charges ... ... | 1,37,202 | 31,556 | .. | ... | 27,44,000 | 1,64,640 | ... | 1,96,196 |
| Tank Maintenance Scheme ... ... | ... | .. | ... | ... | ... | ... | 1,00,630 | 1,00,630 |
| Agricultural Works ... ... ... | 3,20,482 | 73,711 | 10,000 | 1,000 | ... | ... | ... | 74,711 |
| Total ... | 14,05,131 | 2,77,877 | 22,000 | 2,200 | 27,44,000 | 1,64,640 | 1,00,630 | 5,45,347 |
| Total, Imperial ... | 12,37,077 | 2,84,528 | 22,650 | 2,265 | 27,44,000 | 1,64,640 | 1,00,630 | 5,52,063 |
| PROVINCIAL. | | | | | | | | |
| CAPITAL ACCOUNT. | | | | | | | | |
| Buckingham Canal ... ... ... | 1,50,406 | 69,094 | ... | ... | ... | ... | ... | 69,094 |
| Madras Water-supply and Irrigation Extension Project ... ... ... | 19,150 | 4,405 | ... | ... | ... | ... | ... | 4,405 |
| Total ... | 1,69,556 | 73,499 | ... | ... | ... | ... | ... | 73,499 |
| REVENUE ACCOUNT. | | | | | | | | |
| Buckingham Canal ... ... ... | 73,635 | 16,936 | 33,100 | 3,310 | ... | ... | ... | 20,246 |
| Madras Water-supply and Irrigation Extension Project ... ... ... | 9,024 | 2,076 | 5,960 | 596 | ... | ... | ... | 2,672 |
| Total ... | 82,659 | 19,012 | 39,060 | 3,906 | ... | ... | ... | 22,918 |
| Total, Provincial ... | 2,52,215 | 92,511 | 39,060 | 3,906 | ... | ... | ... | 96,417 |
| **F. FAMINE RELIEF AND INSURANCE.** | | | | | | | | |
| **34. PROTECTIVE WORKS—IRRIGATION.** | | | | | | | | |
| Imperial. | | | | | | | | |
| CAPITAL ACCOUNT. | | | | | | | | |
| Rushikulya Project ... ... ... | 2,00,000 | 46,000 | ... | ... | ... | ... | ... | 46,000 |
| Total ... | 2,00,000 | 46,000 | ... | ... | ... | ... | ... | 46,000 |



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# GOVERNMENT OF MADRAS.

## PART VI.

DETAIL OF THE BUDGET ESTIMATE FOR EXPENDITURE ON TOOLS AND PLANT FOR THE YEAR 1884-85.

| — | Estimate, 1884-85. | Estimate, 1883-84. |
|---|---|---|
| | Rs. | Rs. |
| **H. EXPENDITURE ON PUBLIC WORKS NOT CLASSED AS PRODUCTIVE.** | | |
| **44. IRRIGATION AND NAVIGATION.** | | |
| Imperial. | | |
| Irrigation and Navigation Works for which Capital and Revenue Accounts are kept. | | |
| Capital. | | |
| Nil. | | |
| Revenue. | | |
| Tools and Plant, &c. ... ... ... ... ... ... ... ... ... | 368 | ... |
| Irrigation and Navigation Works for which neither Capital nor Revenue Accounts are kept. | | |
| Survey instruments, &c., required for Tank Divisions {No. 1 Tank Division 400 / No. 2 do. 2,000} | 2,400 | 2,400 |
| General Tools and Plant at 1½ per cent. on the grant for Works and Repairs ... | 11,257 | |
| General Tools and Plant at 1½ per cent. on the grant for Works and Repairs on Old Maintenance Charges ... ... ... ... ... | 2,058 | 17,528 |
| *Agricultural Works.* | | |
| General Tools and Plant at 1½ per cent. on the grant for Works and Repairs ... | 4,807 | |
| Total, Imperial ... | 20,890 | 19,928 |
| Provincial. | | |
| Capital—Tools and Plant, &c. ... ... ... ... ... ... ... | 500 | ... |
| Revenue— do. ... ... ... ... ... ... ... | 1,368 | ... |
| General Tools and Plant at 1½ per cent. on the grant for Works and Repairs ... | ... | 4,061 |
| Total, Provincial ... | 1,868 | 4,061 |
| **F. FAMINE RELIEF AND INSURANCE.** | | |
| **34. PROTECTIVE WORKS, IRRIGATION.** | | |
| IMPERIAL. | | |
| Machinery, &c., required for the Rushikulya Project ... ... ... ... | 3,000 | 11,750 |
| General Tools and Plant on the grant for Works and Repairs ... ... ... | ... | 750 |
| Total, Protective ... | 3,000 | 12,500 |
| Grand Total ... | 25,758 | 36,489 |

# GOVERNMENT OF MADRAS.

## PART VI-A.

STATEMENT OF ESTIMATED TOOLS AND PLANT CHARGES BY SYSTEMS OF CANALS FOR 1884-85.

| — | Special Tools and Plant. | General Tools and Plant. | Total. | Grant for Works and Repairs. |
|---|---|---|---|---|
| **H. EXPENDITURE ON PUBLIC WORKS NOT CLASSED AS PRODUCTIVE.** | Rs. | Rs. | Rs. | Rs. |
| **44. IRRIGATION AND NAVIGATION IMPERIAL.** | | | | |
| Capital. | | | | |
| Nil. | | | | |
| Revenue. | | | | |
| Chembrambakam Tank ... ... ... ... ... | 77 | ... | 77 | — 880 |
| Pálár Anicut System ... ... ... ... ... ... | 222 | ... | 222 | 20,913 |
| Pelandorai Anicut System ... ... ... ... ... | 69 | ... | 69 | 8,883 |
| Total ... | 368 | ... | 368 | 28,916 |
| Irrigation and Navigation Works for which neither Capital nor Revenue Accounts are kept ... ... ... ... | ... | 11,257 | 11,257 | 7,50,477 |
| Tank Maintenance Scheme ... ... ... ... ... | 2,400 | ... | 2,400 | 1,96,970 |
| Old Maintenance Charges ... ... ... ... ... | ... | 2,058 | 2,058 | 1,37,202 |
| Agricultural Works ... ... ... ... ... ... | ... | 4,807 | 4,807 | 3,20,482 |
| Total, Imperial ... | 2,768 | 18,122 | 20,890 | 4,03,883 |
| PROVINCIAL. | | | | |
| Capital. | | | | |
| Buckingham Canal ... ... ... ... ... ... | 500 | ... | 500 | 1,50,406 |
| Madras Water-supply and Irrigation Extension Project ... | ... | ... | ... | 19,150 |
| Total ... | 500 | ... | 500 | 1,69,556 |
| Revenue Account. | | | | |
| Buckingham Canal ... ... ... ... ... ... | 1,119 | ... | 1,119 | 73,635 |
| Madras Water-supply and Irrigation Extension Project ... | 249 | ... | 249 | 9,024 |
| Total ... | 1,368 | ... | 1,368 | 82,659 |
| Total, Provincial ... | 1,868 | ... | 1,868 | 2,52,215 |
| **F. FAMINE RELIEF AND INSURANCE.** | | | | |
| 34. PROTECTIVE WORKS—IRRIGATION. IMPERIAL. | | | | |
| Rushikulya Project ... ... ... ... ... ... | 3,000 | ... | 3,000 | 2,00,000 |
| Total ... | ... | ... | ... | ... |

## PART VII.

ABSTRACT OF THE PROBABLE INCREASE OR DECREASE IN THE SUSPENSE ACCOUNTS OF IRRIGATION WORKS IN THE MADRAS PRESIDENCY FOR THE YEAR 1884-85.

None.

All suspense accounts are treated as Provincial.





# GOVERNMENT OF MADRAS.

## APPENDIX A.

ACTUAL AND ESTIMATED CAPITAL ACCOUNT OF IRRIGATION AND NAVIGATION WORKS IN THE MADRAS PRESIDENCY TO END OF THE YEAR 1884-85.

| — | Direct Charges. | Indirect Charges. | | | | Grand Total. |
|---|---|---|---|---|---|---|
| | | Capitalisation of abatement of Land Revenue. | Exchange on Payments in England | Leave and Pension Allowances. | Total. | |
| 1. | 2 | 3 | 4 | 5 | 6 | 7 |
| | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| **IMPERIAL.** | | | | | | |
| CHEMBRAMBAKAM TANK. | | | | | | |
| Actual outlay to end of 1882-83. | 6,24,425 | 85,701 | ... | 26,463 | 1,12,164 | 7,36,589 |
| Probable outlay during 1883-84. | ... | ... | ... | ... | ... | ... |
| Proposed outlay during 1884-85. | ... | ... | ... | ... | ... | ... |
| Total ... | 6,24,425 | 85,701 | ... | 26,463 | 1,12,164 | 7,36,589 |
| PELANDORAI ANICUT SYSTEM. | | | | | | |
| Actual outlay to end of 1882-83. | 3,53,542 | 20,004 | ... | 13,482 | 33,486 | 3,87,028 |
| Probable outlay during 1883-84. | 3,289 | 4,111 | ... | ... | 4,111 | 7,400 |
| Proposed outlay during 1884-85. | ... | ... | ... | ... | ... | ... |
| Total ... | 3,56,831 | 24,115 | ... | 13,482 | 37,597 | 3,94,428 |
| PALAR ANICUT SYSTEM. | | | | | | |
| Actual outlay to end of 1882-83. | 15,92,004 | 16,217 | ... | 72,744 | 88,961 | 16,80,965 |
| Probable outlay during 1883-84. | ... | ... | ... | ... | ... | ... |
| Proposed outlay during 1884-85. | ... | ... | ... | ... | ... | ... |
| Total ... | 15,92,004 | 16,217 | ... | 72,744 | 88,961 | 16,80,965 |
| Total, Imperial ... | 25,73,260 | 1,26,033 | ... | 1,12,689 | 2,38,722 | 28,11,982 |
| **PROVINCIAL.** | | | | | | |
| BUCKINGHAM CANAL. | | | | | | |
| Actual outlay to end of 1882-83. | 48,92,525 | 3,46,527 | ... | 1,35,447 | 4,81,974 | 53,74,499 |
| Probable outlay during 1883-84. | 1,40,973 | ... | ... | 6,819 | 6,819 | 1,47,792 |
| Proposed outlay during 1884-85. | 2,20,000 | ... | ... | 9,673 | 9,673 | 2,29,673 |
| Total ... | 52,53,498 | 3,46,527 | ... | 1,51,939 | 4,98,466 | 57,51,964 |
| MADRAS WATER-SUPPLY AND IRRIGATION EXTENSION PROJECT. | | | | | | |
| Actual outlay to end of 1882-83. | 14,72,958 | 2,08,056 | ... | 28,983 | 2,37,039 | 17,09,997 |
| Probable outlay during 1883-84. | 42,920 | ... | ... | 1,124 | 1,124 | 44,044 |
| Proposed outlay during 1884-85. | 23,555 | ... | ... | 617 | 617 | 24,172 |
| Total ... | 15,39,433 | 2,08,056 | ... | 30,724 | 2,38,780 | 17,78,213 |
| Total, Provincial Works ... | 67,92,931 | 5,54,583 | ... | 1,82,663 | 7,37,246 | 75,30,177 |

# GOVERNMENT OF MADRAS.

## APPENDIX B.

ACTUAL AND ESTIMATED REVENUE ACCOUNT OF IRRIGATION AND NAVIGATION WORKS IN THE MADRAS PRESIDENCY TO END OF 1884-85.

| | Revenue Receipts, 1884-85. | | | Probable Expenses during 1884-85, including Indirect Charges. | Balance, Surplus or Deficit, 1884-85. | Probable Net Surplus or Deficit for 1883-84. | Actual Net Surplus or Deficit to end of 1882-83. | Probable Net Surplus or Deficit to end of 1884-85. |
|---|---|---|---|---|---|---|---|---|
| | Direct Receipts. | Indirect Receipts. | Total. | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| **IMPERIAL.** | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| Chembrambakam Tank ... | 50 | 33,037 | 33,087 | — 1,140 | 34,227 | 20,437 | 2,65,672 | 3,20,336 |
| Pelandorai Anicut System ... | 50 | 6,589 | 6,639 | 11,287 | — 4,648 | — 24,420 | —1,95,868 | — 2,24,936 |
| Pálár Anicut System ... | 550 | 1,07,184 | 1,07,734 | 26,681 | 81,053 | 73,660 | 5,81,755 | 7,36,468 |
| Total ... | 650 | 1,46,810 | 1,47,460 | 36,828 | 1,10,632 | 69,677 | 6,51,559 | 8,31,868 |
| **PROVINCIAL.** | | | | | | | | |
| Buckingham Canal ... ... | 33,100 | ... | 33,100 | 97,834 | —64,734 | —1,25,348 | 5,28,422 | 3,38,340 |
| Madras Water-supply and Irrigation Extension Project ... | 5,960 | 9,837 | 15,797 | 12,319 | 3,478 | 25,334 | — 5,852 | 22,960 |
| Total ... | 39,060 | 9,837 | 48,897 | 1,10,153 | —61,256 | —1,00,014 | 5,22,570 | 3,61,300 |

## APPENDIX C.

ACTUAL AND ESTIMATED INTEREST ACCOUNT OF IRRIGATION AND NAVIGATION WORKS IN THE MADRAS PRESIDENCY TO END OF 1884-85.

| | Actual Charges for Interest to end of 1882-83. | Probable Charges for Interest for 1883-84. | Probable Charges for Interest for 1884-85. | Total to end of 1884-85. | Net Surplus or Deficit from Appendix B. | Balance of Interest Charge remaining unpaid. |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **IMPERIAL.** | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| Chembrambakam Tank ... ... ... | 2,86,128 | 24,977 | 24,977 | 3,36,082 | 3,20,326 | 15,746 |
| Pelandorai Anicut System ... ... ... | 99,205 | 14,206 | 14,271 | 1,27,682 | —2,24,936 | 3,52,618 |
| Pálár Anicut System ... ... ... | 13,71,171 | 63,680 | 63,680 | 14,98,531 | 7,36,468 | 7,62,063 |
| Total ... | 17,56,504 | 1,02,863 | 1,02,928 | 19,62,295 | 8,31,868 | 11,30,427 |
| **PROVINCIAL.** | | | | | | |
| Buckingham Canal ... ... ... ... | 18,90,504 | 1,98,510 | 2,05,739 | 22,94,753 | 3,38,340 | 19,56,413 |
| Madras Water-supply and Irrigation Extension Project ... ... ... ... | 8,40,719 | 59,776 | 61,105 | 9,61,600 | 22,960 | 9,38,640 |
| Total ... | 27,31,223 | 2,58,286 | 2,66,844 | 32,56,353 | 3,61,300 | 28,95,053 |

# GOVERNMENT OF MADRAS.

## APPENDIX D.

ESTIMATED ACCOUNT OF RECEIPTS AND CHARGES OF THE IRRIGATION BRANCH, PUBLIC WORKS DEPARTMENT, IN THE MADRAS PRESIDENCY FOR THE YEARS 1883-84 AND 1884-85.

### RECEIPTS.

| ACCOUNTS. | Budget Estimate, 1884-85. | Revised Estimate, 1883-84. |
|---|---|---|
| | Rs. | Rs. |
| To Balance at commencement of year ... ... ... ... ... ... | ... | ... |
| To Transfers of the Public Works Department— | | |
| Buildings and Roads Branch ... ... ... ... ... ... ... | 60,27,090 | 53,0[illegible]247 |
| To Imperial Fund Receipts— | | |
| *G. Revenue from Productive Public Works.* | | |
| XXVII—Irrigation and Navigation (Direct Receipts) ... ... ... | 1,49,100 | 1,47560 |
| *H. Receipts on account of Public Works not classed as Productive.* | | |
| XXXI—Irrigation and Navigation ... ... ... ... ... ... | 22,650 | 22420 |
| To Provincial Fund Receipts— | | |
| *H. Receipts on account of Public Works not classed as Productive.* | | |
| XXXI—Irrigation and Navigation ... ... ... ... ... ... | 39,060 | 72580 |
| Total ... | 62,38,200 | 55,43,307 |

### CHARGES.

| ACCOUNTS. | Budget Estimate, 1884-85. | Revised Estimate, 1883-84 |
|---|---|---|
| | Rs. | Rs. |
| By Transfers of the Public Works Department— | | |
| Buildings and Roads Branch ... ... ... ... ... ... ... | 2,11,110 | 2,42,560 |
| By Imperial Fund Expenditure ... ... ... ... ... ... ... | ... | ... |
| *F. Famine Relief and Insurance.* | | |
| 34. Protective Works, Irrigation ... ... ... ... ... | 3,99,000 | 1,79,1[illegible] |
| *G. Expenditure on Productive Public Works (Revenue Account).* | | |
| 38. Irrigation and Navigation (working expenses) ... ... ... | 9,20,590 | 9,02,[illegible]09 |
| *H. Expenditure on Public Works not classed as Productive.* | | |
| 44. Irrigation and Navigation (Expenditure in India) ... ... ... | 23,77,000 | 22,77,[illegible] |
| By Provincial Fund Expenditure— | | |
| *H. Expenditure on Public Works not classed as Productive.* | | |
| 44. Irrigation and Navigation ... ... ... ... ... ... ... | 3,50,500 | 3,[illegible] |
| *N. Expenditure on Productive Public Works, Capital Account.* | | |
| 51. Irrigation and Navigation ... ... ... ... ... ... ... | 19,80,000 | 15,97,3[illegible] |
| By Balance at the end of year ... ... ... ... ... ... ... | ... | ... |
| Total ... | 62,38,200 | 55,43,307 |

(Signed) D. C. GORDON,
*Examiner of Public Works Accounts.*

MADRAS,
April 1884.

# GOVERNMENT OF MADRAS.

SCHEDULE A.—SHOWING THE COMPONENT WORKS OF THE BUDGET ITEMS FOR 1884-85.

| Item No. | Main-head. | Name of Canals. | Sub-head. | Individual Work. | Amount of Estimate. | Outlay | | Grant 1884-85. | Item No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | To end of 1882-83. | Probable during 1883-84. | | |
| | | | | | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | | | **H. EXPENDITURE ON PUBLIC WORKS NOT CLASSED AS PRODUCTIVE.** | | | | | |
| | | | | **44. IRRIGATION AND NAVIGATION.** | | | | | |
| | | | | **CAPITAL ACCOUNT.** | | | | | |
| | | | | **Provincial.** | | | | | |
| | | | | **Madras Water-Supply and Irrigation Extension Project.** | | | | | |
| | ... | Cholaveram Tank Supply Channel. | ... | Distributing Channels. | 27,201 | ... | ... | 19,150 | 19,15 |

IRRIGN. AND NAVIGN., AGRICL. AND PROTECTIVE WORKS.

MADRAS PRESIDENCY.

| Divisions. | | | Total. | | |
|---|---|---|---|---|---|
| | | | 84. | 1884-85. | 1883-84. |
| | | | s. | Rs. | Rs. |
| Ganjam ... ... ... ... ... | | | | ... | ... |
| Vizagapatam ... ... ... ... ... | | | | ... | ... |
| Godávari, Eastern ... ... ... ... | | | 400 | 1,400 | 400 |
| Do. Western ... ... ... ... | | | 500 | ... | 500 |
| Kistna, Eastern ... ... ... ... | | | 500 | ... | 1,500 |
| Do. Western ... ... ... ... | | | | ... | 500 |
| Nellore ... ... ... ... ... | | | 100 | 1,000 | 1,100 |
| Bellary ... ... ... ... ... | | | | ... | ... |
| Cuddapah ... ... ... ... ... | | | | ... | ... |
| Kurnool ... ... ... ... ... | | | | ... | ... |
| Coimbatore ... ... ... ... ... | | | 500 | 2,500 | 2,500 |
| Salem ... ... ... ... ... ... | | | 200 | 350 | 200 |
| North Arcot ... ... ... ... ... | | | | ... | ... |
| South Arcot ... ... ... ... ... | | | 400 | 300 | 400 |
| Chingleput ... ... ... ... ... | | | | 1,000 | ... |
| Presidency ... ... ... ... ... | | | | ... | ... |
| Trichinopoly ... ... ... ... ... | | | | 6,000 | 6,000 |
| Tanjore ... ... ... ... ... | | | 500 | 1,500 | 3,700 |
| Negapatam ... ... ... ... ... | | | 100 | ... | 2,400 |
| Madura ... ... ... ... ... | | | | ... | ... |
| Tinnevelly ... ... ... ... ... | | | | 2,000 | 2,000 |
| | | | 200 | 16,050 | 21,200 |
| | | | | 1,950 | ... |
| | | | | ... | 3,100 |
| | | | | 18,000 | 24,300 |

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# GOVERNMENT OF MADRAS.

## SCHEDULE B.—SHOWING THE DISTRIBUTION OF GRANTS FOR MINOR ORIGINAL WORKS FOR 1884-85 BY DIVISIONS.

| Divisions. | Irrigation and Navigation Works for which neither Capital nor Revenue Accounts are kept. | | Agricultural Works. | | | | | | | | Total. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | River Conservancy. | | River Embankment. | | Drainage. | | Miscellaneous. | | | |
| | 1884-85. | 1883-84. | 1884-85. | 1883-84. | 1884-85. | 1883-84. | 1884-85. | 1883-84. | 1884-85. | 1883-84. | 1884-85. | 1883-84. |
| | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| Ganjam ... ... ... ... ... ... ... | 10,000 | 5,000 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Vizagapatam ... ... ... ... ... ... ... | 1,500 | 1,500 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Godávari, Eastern ... ... ... ... ... ... | 5,000 | 3,000 | 500 | ... | 500 | ... | ... | ... | ... | ... | 1,400 | 400 |
| Do. Western ... ... ... ... ... ... | 2,000 | 2,000 | ... | ... | ... | ... | ... | ... | 400 | 400 | ... | 500 |
| Kistna, Eastern ... ... ... ... ... ... | 1,500 | 1,500 | ... | ... | ... | ... | ... | ... | ... | 500 | ... | 1,500 |
| Do. Western ... ... ... ... ... ... | ... | ... | ... | 500 | ... | ... | ... | 1,000 | ... | 500 | ... | 500 |
| Nellore ... ... ... ... ... ... ... | 10,000 | 10,000 | 500 | 500 | 500 | ... | ... | ... | ... | ... | 1,000 | 1,100 |
| Bellary ... ... ... ... ... ... ... | 1,500 | 1,500 | ... | ... | ... | 500 | ... | ... | ... | 400 | ... | ... |
| Cuddapah ... ... ... ... ... ... ... | 3,000 | 3,000 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Kurnool ... ... ... ... ... ... ... | 2,000 | 2,000 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Coimbatore ... ... ... ... ... ... ... | 7,000 | 7,000 | 1,000 | 1,000 | 1,000 | 1,000 | ... | ... | 500 | 500 | 2,500 | 2,500 |
| Salem ... ... ... ... ... ... ... ... | 2,500 | 2,500 | ... | ... | ... | ... | ... | ... | 350 | 200 | 350 | 200 |
| North Arcot ... ... ... ... ... ... ... | 12,000 | 6,000 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| South Arcot ... ... ... ... ... ... ... | 12,000 | 13,000 | ... | ... | ... | ... | ... | ... | ... | ... | 300 | 400 |
| Chingleput ... ... ... ... ... ... ... | 15,000 | 15,000 | 1,000 | ... | ... | ... | ... | ... | 300 | 400 | 1,000 | ... |
| Presidency ... ... ... ... ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Trichinopoly ... ... ... ... ... ... ... | 4,000 | 8,000 | 2,000 | 2,000 | 3,000 | 3,000 | 1,000 | 1,000 | ... | ... | 6,000 | 6,000 |
| Tanjore ... ... ... ... ... ... ... | 1,000 | 1,000 | ... | 200 | 1,000 | 2,000 | 500 | 1,000 | ... | 400 | 1,500 | 3,700 |
| Negapatam ... ... ... ... ... ... ... | 3,000 | 2,000 | ... | 500 | ... | 1,500 | ... | 300 | ... | 100 | ... | 2,400 |
| Madura ... ... ... ... ... ... ... | 7,000 | 7,000 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Tinnevelly ... ... ... ... ... ... ... | 6,000 | 6,000 | ... | ... | 2,000 | 2,000 | ... | ... | ... | ... | 2,000 | 2,000 |
| Total ... | 1,06,000 | 97,000 | 5,000 | 4,700 | 8,000 | 10,000 | 1,500 | 3,300 | 1,550 | 3,200 | 16,050 | 21,200 |
| Reserve ... | 14,479 | 28,000 | ... | ... | ... | ... | ... | ... | ... | ... | 1,950 | ... |
| | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3,100 |
| Grand Total ... | 1,20,479 | 1,25,000 | ... | ... | ... | ... | ... | ... | ... | ... | 18,000 | 24,300 |

MADRAS PRESIDENCY.

## T OF MADRAS.

AC

N AND NAVIGATION AND AGRICULTURAL WORKS FOR WHICH NEITHER CAPITAL NOR REVENUE
RE KEPT FOR 1884-85.

| | Agricultural Works. | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | River Embankment. | | Drainage. | | Miscellaneous. | | Total. | |
| | 1884-85. | 1883-84. | 1884-85. | 1883-84. | 1884-85. | 1883-84. | 1884-85. | 1883-84. |
| | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| | ... | 1,000 | ... | ... | ... | ... | ... | 1,000 |
| Che | ... | ... | ... | ... | ... | ... | 500 | 500 |
| Pel | 4,500 | 3,000 | ... | ... | ... | ... | 11,500 | 8,000 |
| Pál | 2,500 | 1,000 | ... | ... | ... | ... | 7,500 | 6,000 |
| | 2,000 | 1,000 | ... | ... | ... | ... | 7,000 | 8,000 |
| Buc | 9,000 | 10,000 | ... | ... | ... | ... | 10,000 | 11,000 |
| Mac | 2,000 | 4,000 | ... | ... | ... | ... | 3,000 | 5,000 |
| g | 1,000 | 1,000 | ... | ... | ... | ... | 1,500 | 1,500 |
| | ... | ... | ... | ... | ... | ... | ... | ... |
| 5 | 1,000 | 460 | ... | ... | ... | ... | 2,500 | 2,155 |
| | ... | ... | ... | ... | ... | ... | ... | ... |
| | ... | ... | ... | ... | ... | ... | ... | ... |
| | 2,000 | 2,000 | ... | ... | ... | ... | 10,000 | 10,000 |
| | ... | ... | ... | ... | ... | ... | 500 | 400 |
| | ... | ... | ... | ... | ... | ... | ... | ... |
| | 2,000 | 2,000 | ... | ... | ... | ... | 7,000 | 10,000 |
| ACT | 2,000 | 500 | ... | ... | ... | ... | 2,000 | 500 |
| | ... | ... | ... | ... | ... | ... | ... | ... |
| | 11,000 | 11,000 | 500 | ... | ... | ... | 18,500 | 18,000 |
| | 23,000 | 22,200 | 500 | 500 | ... | ... | 39,500 | 38,700 |
| | 15,000 | 15,000 | ... | 500 | ... | ... | 21,000 | 21,500 |
| | ... | ... | ... | ... | ... | ... | ... | ... |
| Chem | 3,000 | 3,000 | ... | ... | ... | ... | 3,000 | 3,000 |
| Pelan | 80,000 | 77,100 | 1,000 | 1,000 | ... | ... | 1,45,000 | 1,45,255 |
| Pálár | ... | ... | ... | ... | ... | ... | 5,000 | 4,745 |
| | ... | ... | ... | ... | ... | ... | 1,50,000 | 1,50,000 |
| Bucki | ... | ... | ... | ... | ... | ... | ... | ... |
| Madra | ... | ... | ... | ... | ... | ... | 1,50,000 | 1,50,000 |
| sion | | | | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| ry .. .. | 4,000 | Tanjore .. .. | 12,000 | | |
| tanr .. .. | 8,500 | Trichinopoly .. | 6,000 | | |
| dpat .. .. | 20,000 | Madura .. .. | 15,000 | | |
| rcot .. | 45,000 | Tinnevelly .. .. | 15,000 | | |
| rcot .. | 40,000 | Reserve .. .. | 92,500 | | |
| .. .. | 18,000 | | | | |
| tore .. .. | 5,000 | Total .. | 3,70,000 | | |



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29TH APRIL 1884, No. 428 I., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

READ—the following paper :—

Proceedings of the Government of India, Public Works Department (Account—Irrigation), dated Fort William, 14th March 1884, No. 57 A.I.

Orders on the Budget Estimate of the Irrigation Branch, Madras, for 1884-85.

*Read*—the following papers :—

| | | | | |
|---|---|---|---|---|
| Resolution | by the Government of India, | Public Works Department, | | No. 121 A.I., dated 8th November 1883. |
| Letter | from the Government of Madras, | Public Works Department, | | No. 18 I., dated 7th January 1884. |
| Ditto | ditto | ditto, | ditto, | No. 34 I., dated 16th January 1884. |
| Telegram | ditto | ditto, | ditto, | dated 23rd January 1884. |
| Ditto | ditto | India, | ditto, | No. 4 A.I., dated 24th January 1884. |
| Letter | ditto | ditto, | ditto, | No. 15 A.I., dated 25th January 1884. |
| Telegram | ditto | Madras, | ditto, | dated 29th January 1884. |
| Ditto | ditto | India, | ditto, | No. 8 A.I., dated 31st January 1884. |
| Letter | ditto, | ditto, | ditto, | No. 19 A.I., dated 1st February 1884. |
| Ditto | ditto | ditto, | ditto, | No. 20 A.I., dated 1st February 1884. |
| Ditto | ditto | ditto, | ditto, | No. 22 A.I., dated 1st February 1884. |
| Telegram, | ditto | Madras, | ditto, | dated 2nd February 1884. |
| Ditto | ditto | India, | ditto, | No. 12 A.I., dated 5th February 1884. |
| Letter | ditto | Madras, | ditto, | No. 134 I., dated 7th February 1884. |
| Ditto | ditto | ditto, | ditto, | No. 149 I., dated 8th February 1884. |
| Ditto | ditto | ditto, | ditto, | No. 173 I., dated 12th February 1884. |
| Ditto | ditto | India, | ditto, | No. 40 A.I., dated 22nd February 1884. |
| Telegram | ditto | Madras, | ditto, | dated 27th February 1884. |
| Ditto | ditto | ditto, | ditto, | dated 28th February 1884. |
| Ditto | ditto | India, | ditto, | No. 37 A.I., dated 29th February 1884. |
| Ditto | ditto | Madras, | ditto, | dated 1st March 1884. |
| Ditto | ditto | ditto, | ditto, | No. 38 A.I., dated 1st March 1884. |
| Ditto | ditto | ditto, | ditto, | No. 39 A.I., dated 4th March 1884. |

## F—FAMINE RELIEF AND INSURANCE.

### 34—PROTECTIVE WORKS—IRRIGATION.

RESOLUTION.—The budget estimate for expenditure during 1884-85 has been prepared for Rs. 5,99,000, the amount provisionally sanctioned in Government of India, Public Works Department, Resolution, No. 121 A.I., dated 8th November 1883.

2. The following statement details the estimated charges for 1884-85, compared with the revised and budget estimates for 1883-84 and the actuals of 1882-83 :—

| | Budget Estimate, 1884-85. | Revised Estimate, 1883-84. | Budget Estimate, 1883-84. | Actuals, 1882-83. |
|---|---|---|---|---|
| IMPERIAL. | RS. | RS. | RS. | RS. |
| *Irrigation and Navigation Works.* | | | | |
| Rushikulya project ... ... ... ... | 2,49,000 | 89,81 | 84,000 | 3,343 |
| Hindupur and Rodham project ... ... | ... | ... | ... | 3,964 |
| Barur tank ... ... ... ... ... ... | ... | —1,242 | ... | 304 |
| Bellary project ... ... ... ... ... | ... | 5,600 | 33,000 | ... |
| Pálár anicut channels ... ... ... ... | ... | 10,189 | ... | 8,275 |
| Suggalair project ... ... ... ... | ... | ... | ... | 4,185 |
| Tungabhadra project ... ... ... ... | ... | ... | ... | 588 |
| Marandahully project ... ... ... ... | ... | ... | ... | 81 |
| Pugalar and Calingarayan channels ... | ... | 12,311 | ... | 3,191 |
| Krishnagiri reservoir ... ... ... ... | ... | 11,253 | 15,000 | 11,478 |
| Vaniar project ... ... ... ... ... | ... | 5,080 | ... | 8,363 |
| Lower Coleroon project ... ... ... ... | ... | ... | 2,000 | ... |
| Bhavání „ ... ... ... ... | ... | ... | 15,000 | ... |
| Periyar „ ... ... ... ... | ... | ... | ... | 5,391 |
| Papanasam „ ... ... ... ... | ... | ... | 18,000 | ... |
| Buckingham „ ... ... ... ... | 1,50,000 | 1,33,000 | ... | 1,531 |
| Ganjam-Gopalpur tidal canal ... .. ... | ... | 10,000 | 83,000 | 13,509 |
| Subsequent modification, details not communicated ... ... ... ... ... ... | ... | —15,981 | ... | ... |
| Total ... | 3,99,000 | 1,79,191 | 2,00,000 | 64,253 |

3. The revised estimate for 1883-84 compared with the budget estimate for that year shows a lapse of Rs. 20,809 as detailed below. The amount withdrawn by the Government of India was from the grants sanctioned for the Rushikulya project and the investigation of projects generally, as the Government of Madras was not able to form the division for the prosecution of the former work, nor to keep the establishment in the project divisions up to the sanctioned scale; a write-back was also made of the outlay incurred on the Barur tank in 1881-82 and 1882-83 from this head to the head "N—Expenditure on Productive Public Works—Capital Account, 51—Irrigation and Navigation" :—

| | RS. | RS. |
|---|---|---|
| Additional grant sanctioned for the Buckingham canal (a work classed as H—14—Provincial) ... ... | | 1,33,000 |
| Deduct—Amount withdrawn in Government of India, Public Works Department, letters, Nos. 22 and 40 A.I., dated 1st and 22nd February 1884, respectively ... ... ... ... | 1,36,586 | |
| Outlay incurred on the Barur tank in 1881-82 and 1882-83 written back to N—Expenditure on Productive Public Works—Capital Account—51—Irrigation and Navigation ... | 1,242 | |
| Surrender intimated by the Government of Madras in telegram, dated 27th February 1884, of which no details were furnished ... | 15,981 | |
| | | 1,53,809 |
| Difference ... | | —20,809 |



## G—REVENUE FROM, AND EXPENDITURE ON, PRODUCTIVE PUBLIC WORKS (REVENUE ACCOUNT).

### XXVII—IRRIGATION AND NAVIGATION—DIRECT RECEIPTS.

4. The following statement details the revenue estimated to be derived in 1884-85 compared with the revised and budget estimates for 1883-84 and actuals of 1882-83 :—

| | Budget Estimate, 1884-85. | Revised Estimate, 1883-84. | Budget Estimate, 1883-84. | Actuals, 1882-83. |
|---|---|---|---|---|
| IMPERIAL. | RS. | RS. | RS. | RS. |
| *Irrigation and Navigation Works.* | | | | |
| Godávari delta system ... ... ... ... | 79,000 | 82,500 | 91,050 | 76,747 |
| Kistna „ „ ... ... ... | 50,200 | 49,800 | 36,580 | 49,727 |
| Pennér anicut „ ... ... ... ... | 200 | 260 | 400 | 157 |
| Cauvery delta „ ... ... ... ... | 8,000 | 8,000 | 9,100 | 8,333 |
| Srivaikuntham anicut system ... ... ... | 2,000 | 2,000 | 1,100 | 1,854 |
| Kurnool canal ... ... ... ... | 10,000 | 5,000 | 5,000 | 76,023 |
| Total ... | 1,49,400 | 1,47,560 | 1,43,230 | 2,12,901 |

5. The revised estimate for 1883-84 compared with the budget estimate for that year shows an increase of Rs. 4,330; this is due chiefly to the increased receipts from navigation on the Kistna delta system.

6. The budget estimate for 1884-85 compared with the revised estimate for 1883-84 shows an increase of Rs. 1,840; this is due chiefly to the increased revenue anticipated from the Kistna delta system and the Kurnool-Cuddapah canal.

### XXVIII—PORTION OF LAND REVENUE DUE TO IRRIGATION.

7. The following statement details the revenue estimated to be credited in 1884-85 compared with the revised and budget estimates for 1883-84 and the actuals of 1882-83 :—

| | Budget Estimate, 1884-85. | Revised Estimate, 1883-84. | Budget Estimate, 1883-84. | Actuals, 1882-83. |
|---|---|---|---|---|
| IMPERIAL. | RS. | RS. | RS. | RS. |
| Godávari delta system ... ... | 15,21,920 | 15,21,920 | 16,25,856 | 14,68,451 |
| Kistna „ „ ... ... | 8,85,312 | 8,85,312 | 9,54,912 | 8,17,606 |
| Pennér anicut „ ... ... | 1,16,000 | 1,16,000 | 1,22,960 | 1,20,470 |
| Cauvery delta „ ... ... | 6,45,888 | 6,45,888 | 8,52,832 | 6,47,874 |
| Srivaikuntham anicut system ... | 87,232 | 87,232 | 69,136 | 89,410 |
| Kurnool canal ... ... ... | 64,960 | 52,896 | 78,880 | ... |
| Total ... | (a) 33,21,312 | (a) 33,09,248 | (a) 37,04,576 | (a) 31,43,811 |

(a)—Excludes collection charges in the Civil Department.

8. The revised estimate for 1883-84 compared with the budget estimate for that year shows a falling off of Rs. 3,95,328. The revised estimate is based on the actuals of the past year and on the average receipts of the past three years. The budget estimate of 1883-84 appears to have been placed at too high a figure.

9. The budget estimate for 1884-85 compared with the revised estimate for 1883-84 shows a small increase of Rs. 12,064; this occurs on the Kurnool-Cuddapah canal, and is due to the closing of the breaches in the Soonkesala anicut and the Tangadancherla tank.

38—IRRIGATION AND NAVIGATION.

10. For expenditure the budget estimate for 1884-85 was prepared for Rs. 9,07,000, the amount provisionally sanctioned in Government of India, Public Works Department, Resolution, No. 121 A.I., dated 8th November 1883; but subsequently an additional sum of Rs. 13,590 was sanctioned in Government of India, Public Works Department, letter, No. 40 A.I., dated 22nd February 1884, which raised the grant for 1884-85 to Rs. 9,20,590.

11. The following statement details the estimated charges for 1884-85 and compares them with the revised and budget estimates for 1883-84 and the actuals of 1882-83:—

| | Budget Estimate, 1884-85. | Revised Estimate, 1883-84. | Budget Estimate, 1883-84. | Actuals, 1882-83. |
|---|---|---|---|---|
| IMPERIAL. | RS. | RS. | RS. | RS. |
| *Irrigation and Navigation Works.* | | | | |
| Godávari delta system ... ... ... ... | 3,64,937 | 3,69,570 | 2,85,621 | 3,15,838 |
| Kistna " " ... ... ... ... | 2,91,160 | 2,83,992 | 2,38,220 | 2,72,168 |
| Cauvery delta " ... ... ... ... | 14,275 | 23,050 | 31,140 | 16,334 |
| Srivaikuntham anicut system ... ... ... | 9,919 | 36,674 | 1,28,034 | 29,217 |
| Kurnool-Cuddapah canal ... ... ... | 19,997 | 8,637 | 22,798 | 17,143 |
| Additional allotment provisionally allowed to stand pending further consideration ... | 2,20,302 | 1,96,496 | 2,40,626 | 1,33,410 |
| Subsequent modifications intimated by telegram, of which details were not given ... | ... | ... | 2,63,161 | ... |
| Total ... | 9,20,590 | 9,02,109 | 12,09,600 | 7,84,110 |

12. The revised estimate for 1883-84 compared with the budget estimate for that year shows a lapse of Rs. 3,07,191 as detailed below. This is due chiefly to certain items of expenditure (old maintenance charges) hitherto shown under this head having, under the orders of the Government of India, been transferred to the head II—44, and also to the fact that an excess grant for establishment was allowed to stand provisionally in the budget estimate, 1883-84, pending further consideration:—

| | RS. | RS. |
|---|---|---|
| Additional grants sanctioned during the year— | | |
| Cauvery delta system ... | | 11,853 |
| Pennér anicut " ... ... ... ... ... | | 12,450 |
| Percentage for establishment charges ... ... ... ... | | 17,245 |
| Godávari delta system ... ... ... ... | 13,500 | |
| | 7,656 | |
| | | 21,156 |
| | | 62,704 |
| Deduct—Amounts withdrawn— | | |
| Old maintenance charges and portion of establishment grant allowed to stand pending further consideration ... ... ... ... ... | 3,29,294 | |
| Surrender on account of net decrease in revenue ... | 3,711 | |
| Surrender of a portion of the grant for the Godávari delta system and Kurnool-Cuddapah canal ... | 20,880 | |
| Surrender intimated by telegram, of which no details have been furnished ... ... ... ... | 16,010 | |
| | | 3,69,895 |
| Net lapse ... | | 3,07,191 |



H—RECEIPTS FROM, AND EXPENDITURE ON, PUBLIC WORKS NOT CLASSED AS PRODUCTIVE.

XXXI—IRRIGATION AND NAVIGATION.

13. The following statement details the revenue expected to be derived in 1884-85 compared with the revised and budget estimates for 1883-84, and the actuals of 1882-83:—

| | Budget Estimate, 1884-85. | Revised Estimate, 1883-84. | Budget Estimate, 1883-84. | Actuals, 1882-83. |
|---|---|---|---|---|
| IMPERIAL. | RS. | RS. | RS. | RS. |
| *Irrigation and Navigation Works.* | | | | |
| Works for which Capital and Revenue Accounts are kept— | | | | |
| Chembrambakum tank ... ... ... | 50 | 100 | 100 | 85 |
| Pálár anicut system ... ... ... | 550 | 270 | 270 | 266 |
| Pelandorai anicut system ... ... ... | 50 | 50 | 50 | ... |
| | 650 | 420 | 420 | 351 |
| Works for which neither Capital nor Revenue Accounts are kept ... ... ... ... | 12,000 | 12,000 | 15,000 | 12,146 |
| *Agricultural Works.* | | | | |
| Works for which neither Capital nor Revenue Accounts are kept ... ... ... ... | 10,000 | 10,000 | 19,000 | 10,130 |
| Total, Imperial ... | 22,650 | 22,420 | 34,420 | 22,627 |
| PROVINCIAL. | | | | |
| *Irrigation and Navigation Works.* | | | | |
| Works for which Capital and Revenue Accounts are kept— | | | | |
| Madras water-supply and irrigation extension project ... ... ... | 5,960 | 30,000 | 12,000 | 32,336 |
| Buckingham canal ... ... ... ... | 33,100 | 42,580 | 1,17,000 | 1,08,127 |
| Total, Provincial... | 39,060 | 72,580 | 1,29,000 | 1,40,463 |
| Grand Total... | 61,710 | 95,000 | 1,63,420 | 1,63,090 |

14. The revised estimate for 1883-84 compared with the budget estimate for that year shows a falling off of Rs. 68,420; made up as follows:—

| | RS. |
|---|---|
| Imperial ... ... ... ... ... ... ... ... ... | 12,000 |
| Provincial ... ... ... ... ... ... ... ... ... | 56,420 |
| Total ... | 68,420 |

The falling off under *Imperial* is due to the revised estimate having been based on the actuals of the previous year, while the falling off under *Provincial* is due to the reduction in the rates of tolls and license fees on boats plying on the Buckingham canal.

15. The budget estimate for 1884-85 compared with the revised estimate for 1883-84 shows a falling off of Rs. 33,290; made up as follows:—

| | RS. |
|---|---|
| Imperial ... ... ... ... ... ... ... ... ... | +230 |
| Provincial ... ... ... ... ... ... ... ... ... | —33,520 |
| Net ... | —33,290 |

The increase under *Imperial* represents the net balance of a few minor increases and decreases on some of the works, while the apparent falling off under *Provincial* is

due to the fact that the amount to be recovered from the Madras municipality for the supply of water to the town of Madras is for one year only, whereas the amount provided in the revised estimate for 1883-84 is the aggregate of the arrears due for several years.

### 44—Irrigation and Navigation.

16. The budget estimate for outlay in 1884-85 was prepared for the amounts noted in the margin, but as provision was made therein to the extent of Rs. 68,000* for expenditure on the Pálár and Pelandorai anicut systems for which revised estimates have been needed for several years past, the Government of India, in Public Works Department letter, No. 22 A.I., dated 1st February 1884, decided to withhold this sum in reserveuntil revised estimates are submitted and sanctioned by competent authority; the provision for 1884-85 under Imperial was accordingly reduced to Rs. 23,77,000. Under Provincial, however, an additional sum of Rs. 1,40,000 was subsequently sanctioned, which raised the grant under this head to Rs. 3,50,500.

| | Rs. |
|---|---|
| Imperial (provisionally sanctioned in Government of India, Public Works Department, Resolution, No. 121 A.I., dated 8th November 1883) | 24,45,000 |
| Provincial ... ... ... ... | 2,10,500 |
| Total ... | 26,55,500 |
| *Pálár anicut system ... ... | 37,100 |
| Pelandorai „ ... ... | 30,900 |
| Total ... | 68,000 |

17. The following statement details the estimated charges for 1884-85 compared with the revised and budget estimates for 1883-84 and the actuals of 1882-83 :—

| — | Budget Estimate, 1884-85. | Revised Estimate, 1883-84. | Budget Estimate, 1883-84. | Actuals, 1882-83. |
|---|---|---|---|---|
| | Rs. | Rs. | Rs. | Rs. |
| Imperial. | | | | |
| *Irrigation and Navigation Works.* | | | | |
| Works for which Capital and Revenue Accounts are kept— | | | | |
| Capital— | | | | |
| Chembrambakum tank | ... | ... | ... | —311 |
| Pálár anicut system ... | ... | ... | 48,000 | —1,39,830 |
| Pelandorai anicut system ... | ... | 3,289 | 25,000 | 22,116 |
| Revenue— | ... | 3,289 | 73,000 | —1,18,025 |
| Chembrambakum tank | —1,000 | 12,375 | 6,360 | —2,835 |
| Pálár anicut system ... ... | 26,000 | 32,929 | 29,907 | 37,846 |
| Pelandorai anicut system ... ... | 11,000 | 30,275 | 11,233 | 46,543 |
| Total ... | 36,000 | 75,579 | 47,500 | 81,554 |
| Works for which neither Capital nor Revenue Accounts are kept ... ... | 36,000 | 78,868 | 1,20,500 | —36,471 |
| | 19,41,000 | 17,86,952 | 13,17,460 | 15,67,318 |
| *Agricultural Works.* | | | | |
| Works for which neither Capital nor Revenue Accounts are kept ... ... | 4,00,000 | 4,40,958 | 5,40,340 | 5,67,993 |
| Subsequent modifications intimated by telegram, of which no details have been given ... ... ... ... | ... | —18,377 | ... | ... |
| Total, Imperial .. | 23,77,000 | (a)22,88,401 | (b)19,78,300 | (c) 20,98,840 |

(a)—Includes Rs. 15,000, (b) Rs. 18,000, and (c) Rs. 10,568 on account of expenditure in England.



| — | Budget Estimate, 1884-85. | Revised Estimate, 1883-84. | Budget Estimate, 1883-84. | Actuals, 1882-83. |
|---|---|---|---|---|
| | Rs. | Rs. | Rs. | Rs. |
| Provincial. | | | | |
| *Irrigation and Navigation.* | | | | |
| Capital— | | | | |
| Buckingham canal ... ... ... | 2,20,000 | 1,47,000 | 1,96,500 | 1,57,455 |
| Madras water-supply project ... | 23,555 | 38,000 | 38,000 | 17,705 |
| | 2,43,555 | 1,85,000 | 2,34,500 | 1,75,160 |
| Revenue— | | | | |
| Buckingham canal .. ... ... | 95,000 | 1,63,200 | 1,03,500 | 1,61,555 |
| Madras water-supply project ... | 11,945 | 13,800 | 12,000 | 16,387 |
| | 1,06,945 | 1,77,000 | 1,15,500 | 1,77,942 |
| Subsequent modifications intimated by telegram, of which no details have been given ... ... ... ... | ... | +4,920 | ... | ... |
| Total, Provincial ... | 3,50,500 | 3,60,893 | 3,50,000 | 3,53,102 |
| Grand Total ... | 27,27,500 | (a) 26,49,294 | (b) 23,28,300 | (c) 24,51,942 |

(a)—Includes Rs. 15,000, (b) Rs. 18,000, and (c) Rs. 10,568, on account of expenditure in England.

18. The revised estimate for 1883-84 compared with the budget estimate for that year shows an increase of Rs. 3,20,994 ; made up as follows :—

| | Rs. |
|---|---|
| Imperial ... ... ... ... ... ... ... ... | 3,10,101 |
| Provincial ... ... ... ... ... ... ... ... | 10,893 |
| Total ... | 3,20,994 |

The increase under *Imperial* is due to the following additional grants sanctioned during the year by the Government of India, Public Works Department, in the letters noted in the margin :—

No. 114 A.I., dated 7th November 1883.
„ 4 A.I., „ 11th January 1884.

| | Rs. |
|---|---|
| Old maintenance charges of productive public works ... ... | 1,63,988 |
| 6 per cent. for establishment charges on the portion of indirect revenue due to old irrigation under productive public works ... | 1,64,490 |
| | 3,28,478 |
| Deduct—Amount surrendered by telegram, of which no details have been given ... ... ... ... ... ... ... | 18,377 |
| | 3,10,101 |

The increase under *Provincial* is the amount of an additional grant sanctioned by the local Financial Department to meet expenditure in England for pumps and engines required for the Buckingham canal.

19. The following statement compares the estimated *direct Capital outlay* on the works in progress to the close of 1884-85 with the sanctioned estimates :—

| — | Sanctioned Amount. | Probable Outlay to end of 1884-85. Actuals to end of 1882-83. | Revised Estimate, 1883-84. | Budget Estimate, 1884-85. | Total. | Balance remaining to be spent. |
|---|---|---|---|---|---|---|
| Imperial— | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| Pálár anicut system | 16,45,589 | 15,92,004 | .. | .. | 15,92,004 | 53,584 |
| Pelandorai ,, | 3,66,388 | 3,53,843 | 12,510 | .. | 3,66,353 | — 464 |
| Provincial— | | | | | | |
| Buckingham canal | 85,12,000 | 48,93,525 | 2,89,000 | 1,81,000 | [illegible] | 31,08,475 |
| Madras water-supply and irrigation extension project | 15,69,229 | 14,72,953 | 28,000 | 25,555 | 15,26,513 | 34,726 |

(a)—Includes grant-in-aid from F. Famine—Relief and Insurance Funds.

20. Completion estimates for the Pálár and Pelandorai anicut systems have been frequently stated to be under the consideration of the Madras Government. Until the completion estimates, so long under consideration, are submitted and sanctioned by competent authority, no further expenditure on these two projects can be permitted; and, as stated in paragraph 16, the provision of Rs. 68,000 made for these works for 1884-85 under Capital has been withheld and placed in reserve until the necessary estimates are submitted and sanctioned by competent authority.

## N—EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT.

### 51—IRRIGATION AND NAVIGATION.

21. The budget estimate for expenditure on productive public works during 1884-85 has been prepared for Rs. 19,80,000, the amount provisionally sanctioned in Government of India, Public Works Department, Resolution, No. 121 A.I., dated 8th November 1883.

22. The following statement details the estimated charges for 1884-85 compared with the revised and budget estimate for 1883-84 and the actuals of 1882-83 :—

| | Budget Estimate, 1884-85. | Revised Estimate, 1883-84. | Budget Estimate, 1883-84. | Actuals, 1882-83. |
|---|---|---|---|---|
| | Rs. | Rs. | Rs. | Rs. |
| Godávari delta system ... ... | 4,58,000 | 3,96,341 | 3,50,000 | 2,20,034 |
| Kistna delta ,, ... ... | 5,25,000 | 4,49,290 | 4,50,000 | 2,00,948 |
| Sangam anicut ,, ... ... | 6,08,000 | 5,49,970 | 4,64,000 | 5,25,847 |
| Cauvery delta ,, ... ... | 2,62,000 | 1,87,849 | 2,00,000 | 30,489 |
| Srivaikuntham anicut system ... | 41,500 | 54,240 | 36,000 | 13,628 |
| Kurnool-Cuddapah canal ... ... | ... | *1,28,000 | *1,60,000 | *1,76,25,819 |
| Barur tank project ... ... ... | 85,500 | 19,613 | ... | ... |
| Subsequent modifications intimated by telegram, of which no details have been given ... ... ... | + 4,000 | —29,950 | ... | ... |
| Total ... | (a)19,84,000 | (b)17,55,353 | 16,60,000 | 1,86,16,765 |

* Purchase price of the canal paid in England.
(a)—Includes Rs. 4,000 and (b) Rs. 30,000 on account of expenditure in England.

23. The revised estimate for 1883-84 compared with the budget estimate for that year shows an increase of Rs. 95,353; made up of the following additional grants sanctioned during the year by the Government of India, Public Works Department, in the letters noted in the margin :—

No. 363 I., dated 19th October 1883.
Telegram, No. 75 C. W. I., dated 24th October 1883.
No. 124 A.I., dated 13th November 1883.
,, 15 ,, ,, 26th January 1884.
,, 19 ,, ,, 29th ,, ,,
,, ,, ,, 1st February ,, ,,
Telegram, No. 12 A.I., dated 5th February 1884.



| | Rs. | Rs. |
|---|---|---|
| Barur Tank ... ... ... ... ... ... ... ... | | 19,613 |
| Sangam Anicut System ... ... ... ... ... | 30,919 | |
| ,, ,, ,, ... ... ... ... ... | 18,551 | |
| ,, ,, ,, ... ... ... ... ... | 36,500 | |
| | | 85,970 |
| Srivaikuntham Anicut System ... ... ... ... ... | | 20,377 |
| Godávari Delta System ... ... ... ... ... ... | | 11,343 |
| ,, ,, ,, ... ... ... ... ... ... | | 20,000 |
| Total ... | | 1,57,303 |
| Deduct—Reduction in estimated expenditure in England in 1883-84 on account of purchase of Kurnool-Cuddapah Canal ... ... ... | —32,000 | |
| Increased expenditure in England on account of stores. | + 15,000 | 17,000 |
| Net increase ... | | 1,40,303 |
| Deduct—Subsequent modification telegraphed by the Government of Madras, of which no details have been given ... | | 44,950 |
| Balance ... | | 95,353 |

24. The following statement details the estimated *direct* capital outlay on the works in progress to end of 1884-85 compared with the sanctioned estimates :—

| — | Sanctioned estimate. | Probable outlay to end of 1884-85. Actuals to end of 1882-83. | Revised Estimate, 1883-84. | Budget Estimate, 1884-85. | Total. | Balance remaining to be spent. |
|---|---|---|---|---|---|---|
| | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| Godávari Delta System .. .. | 1,16,88,695 | 92,39,974 | 3,96,341 | 4,[illegible],000 | 1,00,[illegible],315 | 9,[illegible],380 |
| Kistna Delta System .. .. | 1,38,99,784 | 58,74,768 | 4,49,290 | 5,25,000 | 68,[illegible],068 | 70,50,726 |
| Sangam Anicut System .. .. | 28,96,437 | 7,57,164 | 5,49,970 | 6,[illegible],000 | 19,15,124 | 9,81,313 |
| Cauvery Delta do. .. .. | 16,80,217 | 10,47,663 | 1,87,849 | 2,62,000 | 14,97,512 | 1,82,705 |
| Srivaikuntham Anicut System .. | 13,61,520 | 12,38,078 | [illegible] | [illegible] | [illegible] | [illegible] |
| Kurnool-Cuddapah Canal .. .. | 1,77,53,819 | 1,76,26,819 | 1,28,000 | .. | 1,77,53,819 | 27,702 |
| Barur Tank Project .. .. | 3,20,000 | (a) | 29,613 | 85,500 | 1,05,113 | 2,14,887 |

(a)—Excludes outlay incurred under H—46 not written back yet to N—54.

25. The following statement shows the financial results of the Irrigation and Navigation Works for which Capital and Revenue Accounts are kept to the close of 1884-85 :—

| — | Capital outlay to end of 1884-85. Direct. | Indirect. | Total. | Net Revenue, including enhanced Land Revenue. Actuals to end of 1882-83. | Revised Estimate, 1883-84. | Budget Estimate, 1884-85. | Total to end of 1884-85. | Charges for interest to end of 1884-85. | Net revenue in excess of interest to end of 1884-85. |
|---|---|---|---|---|---|---|---|---|---|
| *Productive Public Works.* | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| Godávari Delta System .. | 1,00,94,315 | 18,57,911 | 1,19,52,226 | 2,38,30,805 | 12,16,181 | 12,16,983 | 2,62,63,969 | 89,47,049 | 1,73,16,920 |
| Kistna Delta System. | 68,49,058 | 5,44,694 | 73,93,752 | 1,03,73,435 | 6,38,721 | 6,31,720 | 1,16,43,876 | 53,26,664 | 63,17,212 |
| Pennér Anicut ,, | 14,28,862 | 2,36,297 | 16,65,159 | 12,09,759 | 91,928 | 1,00,885 | 14,02,572 | 11,88,841 | 2,13,731 |
| Sangam Anicut ,, | 19,15,124 | 1,99,031 | 21,14,155 | .. | .. | .. | .. | 1,31,149 | —1,31,149 |
| Cauvery Delta ,, | 14,97,512 | 1,55,231 | 16,52,743 | 1,40,28,384 | 6,12,691 | 6,40,141 | 1,52,81,216 | 12,60,541 | 1,40,20,675 |
| Srivaikuntham Anicut System .. .. | 13,33,818 | 1,15,491 | 14,49,309 | 3,47,082 | 79,779 | 68,121 | 4,94,982 | 6,95,649 | —2,00,667 |
| Kurnool-Cuddapah Canal .. .. | 1,77,53,819 | .. | 1,77,53,819 | —63,708 | —1,44,901 | —1,51,534 | —3,60,143 | 17,70,247 | —21,30,390 |
| Barur Tank Project. | 1,05,113 | 11,794 | 1,16,907 | .. | .. | .. | .. | 2,886 | —2,886 |
| Total .. | 4,09,77,621 | 31,20,449 | 4,40,98,070 | 4,97,25,757 | 24,94,399 | 25,06,316 | 5,47,26,472 | 1,93,23,026 | 3,54,03,446 |
| *Public Works not classed as Productive.* | | | | | | | | | |
| Chembrambakum Tank .. .. | 6,24,425 | 1,12,164 | 7,36,589 | 2,65,672 | 20,437 | 34,227 | 3,20,336 | 3,36,082 | —15,746 |
| Pelandorai Anicut System .. .. | 3,66,052 | 40,191 | 4,06,243 | —1,95,868 | —24,420 | —4,648 | —2,24,936 | 1,28,229 | —3,53,175 |
| Pálár Anicut System. | 15,92,004 | 2,42,282 | 18,34,286 | 5,81,755 | 73,660 | 81,053 | 7,36,468 | 14,98,531 | —7,62,063 |
| Total .. | 25,82,481 | 3,94,637 | 29,77,118 | 6,51,559 | 69,677 | 1,10,632 | 8,31,868 | 29,62,852 | —11,30,984 |

26. The authorizations herewith given are subject to the condition of a strict adherence to the rules in force in regard to financial regularity of departmental work.

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*Order*—Ordered, that this Resolution be communicated to the Government of Madras, in the Public Works Department, for information and guidance, with the request that 35 printed copies of the final issues of the budget estimates, as now passed, may be submitted so as to reach this office not later than the 1st May 1884.

(Signed) W. S. TREVOR, Colonel, R.E.,
Secretary to the Government of India.

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Telegram from the Secretary to Government, Public Works Department, to the Secretary to the Government of India, Public Works Department, Simla, dated Madras, 5th April 1884.

Your No. 57 A. I., 14th ultimo.

Para. 17. Revised estimate reduced by Rs. 30,377 in my telegram, 27th February, and increased by Rs. 15,000 in my telegram, 1st ultimo. Net reduction 15,377 not 18,377.

Paras. 22 and 23. Rs. 15,000 for increased expenditure in England for stores included in previous figures. Total revised estimate should be only 17,40,353 as shown in corrected copy sent with my No. 284 I., 12th ultimo. Can correct figures be adopted in final issue?

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Telegram from the Secretary to the Government of India, Public Works Department, to the Secretary to the Government of Madras, Public Works Department, dated Simla, 8th April 1884.

Your telegram fifth. Final issue revised estimate; must adopt figures passed in orders.

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No. 86 I.

*Note by the Chief Engineer for Irrigation.*

The accompanying budget estimates, final issue, for Productive Public Works and for Irrigation and Navigation and Agricultural and Protective Works for 1884-85, which has been prepared in conformity with the orders of the Government of India, No. 57 A.I., dated 14th March 1884, are submitted to Government with the following remarks.

2. The revised estimate of expenditure for 1883-84 and the budget estimate for 1884-85 under each head are as shown below :—

| | Revised Estimate, 1883-84. | Budget Estimate, 1884-85. |
|---|---|---|
| *Imperial.* | Rs. | Rs. |
| N. Productive Public Works—Capital Account ... | 17,55,353 | 19,84,000 |
| G. Do. do. Revenue do. ... | 9,02,409 | 9,20,590 |
| H. Public Works not classed as Productive ... | 22,88,401 | 23,77,000 |
| F. Famine Relief and Insurance ... ... ... | 1,79,191 | 3,99,000 |
| Total ... | 51,25,354 | 56,80,590 |
| *Provincial.* | | |
| H. Public Works not classed as Productive ... | 3,60,893 | 3,50,500 |
| Grand Total ... | 54,86,247 | 60,31,090 |

IMPERIAL.

N. PRODUCTIVE PUBLIC WORKS—CAPITAL ACCOUNT.

3. Some confusion has arisen under this head regarding the amount to be provided for "expenditure in England." In the preliminary issue of the budget as



submitted by this Government, the provision for "expenditure in England" was as follows :—

| | Rs. |
|---|---|
| Balance of purchase-money of Kurnool-Cuddapah Canal ... ... | 1,60,000 |
| Stores ... ... ... ... ... ... ... ... | 37,510 |
| Total ... | 1,97,510 |

In their first orders, dated 22nd February, on the preliminary issue, the Government of India reduced the provision for "expenditure in England" to Rs. 1,43,000, of which Rs. 1,28,000 was for the Kurnool-Cuddapah canal, and Rs. 15,000 for stores. The reduction of Rs. 32,000 in the provision for the Kurnool-Cuddapah canal was surrendered to the Government of India by telegram on February 28th, but the original provision for stores remained unaltered. The Government of India intimated by telegram on March 1st, that the provision for expenditure in England on account of stores should be increased from Rs. 15,000 to Rs. 30,000, and the balance then remaining of Rs. 7,510, was surrendered by telegram on March 1st. In spite, however, of full provision for the expenditure on stores having thus been made, the Government of India, in their final orders, dated 14th March, on the preliminary issue of the budget, included a further provision of Rs. 15,000, so that Rs. 45,000 in all are now available, as it was said to be impossible to correct the mistake in the figures, and to reduce the accepted total. It is now suggested that the surplus, Rs. 15,000, should be made available for the adjustment of the charge in connection with the Priestman's dredger purchased for the Godávari Delta. This charge is treated as final in the home accounts under the head "H. Expenditure on Public Works not classed as Productive," but this is wrong, and the charge should properly be under the head "N. Expenditure on Productive Public Works, Capital Account," as stated in paragraph 3 of note No. 43 I., dated 8th March, printed in Proceedings of Madras Government, No. 283 I., of March 12th. The adjustment in question has to be carried out in the Indian accounts.

4. The schedules showing the distribution, by component works, of the grant for 1884-85, under this head, received from the Superintending Engineers, have been revised in this office so as to work up to the sanctioned accounts.

G. EXPENDITURE ON PRODUCTIVE PUBLIC WORKS—REVENUE ACCOUNT.

5. The grant sanctioned for 1884-85, under this head, does not include any provision for expenditure on revenue account on the Sangam anicut system. The budget estimate of irrigation revenue does also not include the revenue expected to be derived from this system, as the probability of this system commencing to yield revenue during 1884-85 was not known when the preliminary issue of the budget estimates was prepared. The Superintending Engineer, II Circle, reports that the Main canal and Kanigiri tank will both be completed by September next, in time to receive the freshes of the north-east monsoon; also that the first six miles of the Eastern channel from the Kanigiri tank will be finished, and that the Alleru, Yelliapalem, and Duvur branch channel, and the Central channel from the Kanigiri tank will also be ready to receive a supply. He estimates the revenue to be derived at Rs. 16,000, allowing Rs. 5 per acre on the additional 3,200 acres which he expects to irrigate during the year according to the marginally noted calculation, and he applies for Rs. 16,000 for expenditure under Maintenance and Repairs. Including the share of establishment charges, the estimate of expenditure exceeds the estimate of revenue by Rs. 3,680. The Superintending Engineer should report the nature of the work to be carried out and whether the amount proposed is required for expenditure before water is, for the first time, let into the channels or

| | Increased Area of Irrigation. Acs. |
|---|---|
| Duvur branch channel ... ... | 200 |
| *Kanigiri tank.* | |
| Eastern channel ... ... ... | 500 |
| Allera branch channel ... ... | 300 |
| Yelliapalem channel ... ... | 200 |
| Central channel ... ... ... | 2,000 |
| Total ... | 3,200 |

on repairs to be executed after the irrigation season is over. In the former case the expenditure should be treated as repairs during construction, and charged to capital account. It seems improbable that Rs. 16,000 will be required during the current official year for repairs after the close of the irrigation season, and the Superintending Engineer should report the amount absolutely necessary for repairs chargeable to the revenue account of the system. An application for an additional allotment may then be submitted to the Government of India if the amount required cannot be met by reappropriation. The opinion of the Collector regarding the estimate of irrigation revenue does not appear to have been obtained. The Director of Revenue Settlement and Agriculture may be requested to ascertain, in communication with the Collector, and report whether the Superintending Engineer's estimate may be accepted, and if so, to include the amount in his revised estimate of irrigation revenue for 1884-85.

H. Public Works not classed as Productive.

6. The Government of India reduced the total revised estimate for 1883-84, under this head, by Rs. 3,000, and this amount has been deducted as marginally noted, the Superintending Engineer, VI Circle, having reported a large surrender from the grant for the Támbraparni flood embankments, which was not accepted, as his report had been received after the close of the official year.

| Agricultural Works. River embankments. | Rs. |
|---|---|
| Támbraparni river left bank from the Srivaikuntham anicut to 7½ miles ... | 2,410 |
| Establishment at 23 per cent. ... | 554 |
| Tools and plant at 1½ per cent. ... | 36 |
| Total ... | 3,000 |

7. The grants for minor original works under "Irrigation and Navigation Works for which neither Capital nor Revenue Accounts are kept" in the Ganjam and North Arcot divisions have been increased from Rs. 5,000 to 10,000, and from Rs. 6,000 to 12,000, respectively, the Superintending Engineers concerned having reported that the original allotments were insufficient. The amount provided for reserve at the disposal of Government is consequently reduced by Rs. 11,000.

F. Famine Relief and Insurance.

8. The Superintending Engineer, I Circle, should expedite the submission of the schedule of expenditure for the Rushikulya project showing his proposed distribution of the grant for the current year. No time should be lost in putting the works in hand so as to fully utilize the whole of the grant.

PROVINCIAL.

H. Public Works not Classed as Productive.

9. The Superintending Engineer, V Circle, has been requested to submit a revised schedule of expenditure on the works proposed to be executed on the Buckingham canal during the current year, in accordance with the arrangements sanctioned in G.O., No. 814 W., dated 25th March 1884. These provided for the carrying out of the completion works on the canal thoroughly and continuously, proceeding southwards from Pedda Ganjam in the Kistna district.

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Order—dated 29th April 1884, No. 427 I., Public Works.

The budget estimates, final issue, for Irrigation Productive Public Works and for Irrigation and Navigation, Agricultural and Protective Works, for 1884-85, as drawn up by the Chief Engineer for Irrigation are approved, and a copy thereof, together with a copy of these proceedings in manuscript, will be forwarded to the Government of India. The remaining copies required by the Government of India will be forwarded as soon as these proceedings are printed.

2. The cost of repairs to the channels of the Sangam anicut project before water is let into them for the first time will be treated as repairs during construction and



charged to capital account. The Superintending Engineer, II Circle, will apply for such allotment as may be absolutely necessary for repairs chargeable to the revenue account of the system.

3. The Director of Revenue Settlement and Agriculture will, in communication with the Collector of Nellore, report whether the Superintending Engineer's estimate of irrigation revenue during 1884-85, from the Sangam anicut system, may be accepted.

4. The Superintending Engineer, I Circle, will expedite the submission of the schedule of expenditure proposed on the Rushikulya project during the year.

5. The Superintending Engineer, V Circle, will expedite the submission of the revised schedule of expenditure on the works proposed to be executed on the Buckingham canal.

6. The orders of the Government of India will be requested on the suggestion contained in the latter part of paragraph 3 of the note by the Chief Engineer for Irrigation.

(Here enter No. 428 I., dated 29th April 1884.)

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

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

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Endorsement—dated 29th April 1884, No. 428 I., Public Works.

Forwarded.

(Signed) J. O. HASTED, Colonel, R.E.,
Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

Exd. A. Aubert.
Spare Copies

IRRIGATION.
ACCOUNT.

# Govt. of (1884) Madras.

PUBLIC WORKS.

*Dated April, 1884.*

*Recd.* *Encl.*

**G.O., 29th April 1884, No. 428 I.**

**APRIL.**

538-539

**Budget Estimates**

Forwarding a copy of the final issue of the — of the Irrigation branch, Madras, for 1884-85, together with a copy of the proceedings approving the same with remarks.



GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 14.

READ—the following papers:—

Letter to the Superintending Engineer, First Circle, dated 16th November 1881, No. 6 I.
Letter from the „ „ „ „ 6th January 1882, No. 66 G.L.
Letter to the „ „ „ „ 18th „ „ „ 1 I.
Letter from the „ „ „ „ 2nd February „ „ N.
Letter to the „ „ „ „ 6th March „ „ 20 G.D.
Letter to Messrs. T. A. Taylor & Co., dated 12th April 1882, No. 66 M.
Letter from Messrs. T. A. Taylor & Co., dated 18th April 1882.
Letter from the Superintending Engineer, First Circle, dated 20th April 1882, No. 26.

No. 14-A.

READ—the following Note by the Chief Engineer for Irrigation, dated Ootacamund, 1st May 1882, No. 36 I.

It is most desirable that dredging should be more extensively practised, than has hitherto been the case, on the main lines of canal communication in the Godávari and Kistna Deltas, in order to avoid the closure of the canals for clearances, and, as a preliminary step, it is necessary to ascertain which is the most economical and suitable form of excavator that can be obtained.

2. The only dredgers hitherto used in the Godávari Delta are the old form of ladder and bucket dredger, which have now been generally superseded in England and America by a new and improved form of excavator. Such an improved dredger is that known as "Priestman's Patent Dredger."

3. It is therefore recommended that a Priestman's "A" Dredger be procured by Indent on the Secretary of State, and that, if found suitable, they be generally introduced on the Delta Canals.

4. Plans of the boats in use in the Godávari Delta have been supplied to Messrs. T. A. Taylor & Co., who have forwarded them to Messrs. Priestman Brothers, in order that it may be ascertained what alterations will be necessary to enable the patent dredger to be fitted in them.

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

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

No. 15.

ORDER—dated 8th May 1882, No. 382 I., Public Works.

The proposal of the Chief Engineer for Irrigation to obtain a Priestman's Patent Dredger for trial, with a view to the ultimate introduction of these machines on the Delta Canals of this Presidency, is approved. Sanction is therefore accorded to the purchase in England of a Priestman's Patent Dredger of the "A" size, the estimated cost of which delivered in the Madras Roads is Rs. 5,600.

2. The enclosure to the Superintending Engineer's letter, No. 26, dated 20th April 1882, will be communicated to the General Superintendent of Public Works Stores, who will prepare, without delay, a special indent for submission to the Secretary of State for the dredger, which, as stated by the Superintending Engineer, First Circle, will be much required towards the end of this year.

3. The Superintending Engineer, First Circle, will report whether the grant for works of the Godávari Delta on Capital Account for the current year can be reduced, in order to provide funds to meet the cost of the dredger.

4. A communication will be addressed to Colonel Mullins, R.E., now in England on furlough, with a view to ascertain whether he will be able to help in the selection of the dredger required, and a letter on the subject will be addressed to the Secretary of State when forwarding the indent.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, First Circle.
" " " Second Circle.
" Chief Engineer for Irrigation.
" General Superintendent, Public Works Stores, with one Enclosure.
" Examiner of Public Works Accounts.
To Messrs. T. A. Taylor & Co.
" Colonel Mullins, R. E.

Exd. A. F. Goodall.
Space Copies

IRRIGATION.
ACCOUNT.

# Govt. of [1882] Madras.

## PUBLIC WORKS.

*Dated May, 8th.*

*Recd.* *Encl.*

**G.O., 8th May 1882, No. 382 I.**

**MAY.**

**Nos. 14-15.**

**Priestman's Patent Dredger.**

*Sanction accorded to the purchase in England of a* — for trial on the Delta Canals of this Presidency.

3232/48

3RD JUNE 1882, No. 439 I., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 7.

READ—the following letter from Lieutenant W. L. C. BADDELEY, R.E., General Superintendent, Public Works Stores, &c., to the Deputy Chief Engineer, Public Works Department, dated Madras, 23rd May 1882, No. 341 S.:—

With reference to G.O., dated 8th May 1882, No. 382 I., I have the honor to forward, for submission to Government, special indent, in triplicate, for one Priestman's Patent Dredger, "A" size, with copy of specification appended to each.

No. 8.

ORDER—dated 3rd June 1882, No. 438 I., Public Works.

Ordered that the special indent for a Priestman's Patent Dredger, "A" size, required for trial on the canals of the Godávari Delta, be forwarded to the Secretary of State for India, with a request that the necessary arrangements may be made for its early supply.

2. Funds will be appropriated on receipt of the report, called for in paragraph 3 of G.O., No. 382 I., dated 8th May 1882, from the Superintending Engineer, First Circle.

3. Ordered that a copy of these Proceedings be forwarded to the Government of India for information.

(Here enter No. 439 I., dated 3rd June 1882.)

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.
Irrigation Branch.

To the Superintending Engineer, First Circle.
" " " Second Circle.
" Chief Engineer for Irrigation.
" General Superintendent, Public Works Stores.
" Examiner of Public Works Accounts.

No. 8-A.

ENDORSEMENT—dated 3rd June 1882, No. 439 I., Public Works.

Copy forwarded to the Government of India.

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

Exd A. F. Goodall,
Spare Copies

IRRIGATION.
ACCOUNT.

Govt. of [1882] Madras

PUBLIC WORKS.

*Dated* June, 3rd.

*Recd.* *Encl*

G.O., 3rd June 1882, No. 439 I.

JUNE.

Nos. 7—8-A.

**Priestman's Patent Dredger, "A" Size.**

FORWARDING copy of Proceedings to the Secretary of State submitting an indent for a Priestman's Patent Dredger, "A" size, for the Godávari Delta Canals.



3032/89

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

READ—the following letter from the Superintending Engineer, I Circle, to the Chief Engineer for Irrigation, dated Dowlaishweram, 22nd April 1885, No. 174 G.D. :—

I have the honor to submit, herewith, an estimate, in duplicate, amounting to Rs. 16,580, for the Priestman's dredger obtained from England for Godávari canals (see G.Os., Nos. 382 I., dated 8th May 1882, and 438 I., of 3rd June 1882), and to request that you will be good enough to obtain the sanction of Government to the same from the lump sum provided for tools and plant in the Godávari delta project estimates.

ORDER—dated 13th May 1885, No. 447 I., Public Works.

The estimate, amounting to Rs. 16,580, for the Priestman's dredger, B size, obtained from England for use on the Godávari canals, is sanctioned from the balance of the lump sum provided for tools and plant in the delta completion estimates, which will then be reduced to Rs. 56,227.

2. This sanction has been registered as No. 43 I. of 1885-86, and classified as shown below :—

N. Expenditure on Productive Public Works.
Capital Account.
51. Irrigation and Navigation.
Godávari Delta System.
III. Tools and Plant.
(12) Miscellaneous.

One Priestman's dredger, B size, Estimate ... ... ... Rs. 16,580

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, I Circle, with one enclosure.
„ Chief Engineer for Irrigation.
„ Examiner, Public Works Accounts, with duplicate abstract estimate.
„ Revenue Department.

Exd. E. Fernandez.
Spare Copies

IRRIGATION.
ACCOUNT.

Govt. of [1885] Madras.

PUBLIC WORKS.

303245

*Dated May, 13th.*

*Recd.* *Encl*

G.O., 13th May 1885, No. 447 I.

MAY.

303211

**Priestman's Dredger**

Estimate for — obtained from Engla
for use on the Godávari canals, sanctioned



3032
5c

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

**Irrigation.**
**Account.**

READ—the following letter from Lieutenant-Colonel A. FILGATE, R.E., Deputy Secretary to the Government of India, Public Works Department (Account —Irrigation), to the Secretary to the Government of Madras, Public Works Department, dated Simla, 21st May 1884, No. 73 A.I.:—

I am directed to acknowledge the receipt of the final issue of the budget estimates of the Irrigation Branch, Madras, for the year 1884-85, forwarded with your docket No. 428 I., dated the 29th April 1884, and with reference to paragraph 3 of the note by the Chief Engineer for Irrigation therewith submitted, to state that the Government of India has no objection, if it can be arranged locally, to debit the cost of the dredger in question against the revised estimate of expenditure on Productive Public Works, Capital Account for 1883-84, as passed in the budget orders.

2. I am also to point out that the figures of the revised estimates of expenditure on Productive Public Works, Capital and Revenue Accounts, given in page 6 of the budget estimate of Productive Public Works, differ in detail from those passed by the Government of India, though the totals are the same. As it is very desirable that the budget and revised or final estimates should agree in every detail with the estimates passed by the Government of India, it is requested that in future the final issue of the budget estimates may be prepared accordingly.

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ORDER—dated 6th June 1884, No. 538 I., Public Works.

The Examiner of Public Works Accounts will see that the charge in connection with the Priestman's dredger obtained from England for the Godávari delta which has been treated in the Home accounts as a final charge under "H. Expenditure on Public Works not classed as Productive," is adjusted in the Indian accounts for 1883-84 to the debit of "N. Expenditure on Productive Public Works, Capital Account."

2. With reference to paragraph 2 of the above letter, it is observed that the differences referred to, are due to the distribution, by systems, of the "subsequent modifications" shown in lump sums in the statements in the paragraphs 11 and 12 of the Government of India Resolution No. 57 A.I., dated 14th March 1884. Should the Government of India still consider this course objectionable, the instructions now given by them will be adhered to in future.

3. Ordered that a copy of these proceedings be forwarded to the Government of India for information.

(Here enter No. 539 I., dated 6th June 1884.)

(True Extract.)

Lieut.-Col., R.E.,
*for* Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

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

Exd. A. Aubert.
Spare Copies

1/2532
51

IRRIGATION.
ACCOUNT.

# Govt. of {1884} Madras.

## PUBLIC WORKS.

*Dated June, 6th.*

*Read.* *Encl.*

**G.O., 6th June 1884, No. 538 I.**

**JUNE.**

**Priestman's Dredger**

*Ordering, with remarks, the charge connected with the* — obtained for the Godávari delta, to be adjusted in the Indian accounts for 1883-84 to the debit of "N. Expenditure on Productive Public Works, Capital Account."



3632
52

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

READ—the following letter from Lieutenant-Colonel A. FILGATE, R.E., Deputy Secretary to the Government of India, Public Works Department (Account —Irrigation), to the Secretary to the Government of Madras, Public Works Department, dated Simla, 21st May 1884, No. 73 A.I.:—

I am directed to acknowledge the receipt of the final issue of the budget estimates of the Irrigation Branch, Madras, for the year 1884-85, forwarded with your docket No. 428 I., dated the 29th April 1884, and with reference to paragraph 3 of the note by the Chief Engineer for Irrigation therewith submitted, to state that the Government of India has no objection, if it can be arranged locally, to debit the cost of the dredger in question against the revised estimate of expenditure on Productive Public Works, Capital Account for 1883-84, as passed in the budget orders.

2. I am also to point out that the figures of the revised estimates of expenditure on Productive Public Works, Capital and Revenue Accounts, given in page 6 of the budget estimate of Productive Public Works, differ in detail from those passed by the Government of India, though the totals are the same. As it is very desirable that the budget and revised or final estimates should agree in every detail with the estimates passed by the Government of India, it is requested that in future the final issue of the budget estimates may be prepared accordingly.

ORDER—dated 6th June 1884, No. 538 I., Public Works.

The Examiner of Public Works Accounts will see that the charge in connection with the Priestman's dredger obtained from England for the Godávari delta which has been treated in the Home accounts as a final charge under "H. Expenditure on Public Works not classed as Productive," is adjusted in the Indian accounts for 1883-84 to the debit of "N. Expenditure on Productive Public Works, Capital Account."

2. With reference to paragraph 2 of the above letter, it is observed that the differences referred to, are due to the distribution, by systems, of the "subsequent modifications" shown in lump sums in the statements in the paragraphs 11 and 12 of the Government of India Resolution No. 57 A.I., dated 14th March 1884. Should the Government of India still consider this course objectionable, the instructions now given by them will be adhered to in future.

3. Ordered that a copy of these proceedings be forwarded to the Government of India for information.

(Here enter No. 539 I., dated 6th June 1884.)

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

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

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ENDORSEMENT—dated 6th June 1884, No. 539 I., Public Works.

Forwarded.

Lieut.-Col., R.E.,
*for* Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

Exd. A. Aubert.
Spare Copies

832/53

IRRIGATION.
ACCOUNT.

# Govt. of {1884} Madras.

PUBLIC WORKS.

*Dated June, 6th.*

*Recd.* *Encl.*

G.O., 6th June 1884, No. 539 I.

JUNE.

**Priestman's Dredger**

Forwarding copy of proceedings ordering, with remarks, the charge connected with the — obtained for the Godávari delta, to be adjusted in the Indian accounts for 1883-84 to the debit of "N. Expenditure on Productive Public Works, Capital Account."

*All communications should be addressed to the Secretary.*

No. 73 A.I. 1 (3432) 54

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

ACCOUNT.

Irrigation

To The Secretary
to the Government of Madras,
Public Works Department.

Simla, 21st May. 1884.

Recd 25/5

Sir,

I am directed to acknowledge the receipt of the final issue of the Budget Estimates of the Irrigation branch, Madras, for the year 1884/85, forwarded with your docket No. 428 I dated the 29th April 1884, and with reference to para: 3 of the note by the Chief Engineer for Irrigation therewith submitted, to state that the Government of India has no objection if it can be arranged locally to debit the cost of the dredger in question against the Revised Estimate of expenditure on Productive Public Works Capital account for 1883/84 as passed in the Budget order.

2 I am also to point out that the figures of the Revised Estimates of expenditure

or

No 4511.

on Productive Public works - Capital and Revenue accounts, given in page 6 of the Buoget Estimate of Productive Public works differ in detail from those passed by the Government of India though the totals are the same. As it is very desirable that the Buoget and Revised or Final estimates should agree in every detail with the estimates passed by the Government of India, it is requested that in future the Final issue of the Buoget Estimates may be prepared accordingly -

Rec'd 29/5/84

I have the honor to be,
Sir,
Your most obed't Servant
A Tilghman Lt-Col R.E.

Dy Secy to Govt of India

Ans Madras
23/5/84

No 538/539 Sd/ 6.6.84

4289 29.4.84

From the Gov. of Madras

Read the following
Letter No 53 dated 21st May/84
—"

Order thereon.

The Examiner of P.W. Accounts will see that the charge in connection with the Breastwork Dredger obtained from England for the Godavari Delta and traced in the Home Accounts as a final Charge under "Expenditure on Public works not classed as Productive" is adjusted in the Indian Accounts for

PWD / 1654

Ex. 87

I don't remember that Rao Bahadur mentioned in Council — let some one consult it —

2/5

F.C.I 20/5

Govt 30/5

B-6-6.84

Public Works Department.

Read 4/6/84

No. 5 in 32/57

## PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 6th June 1884

Read the following

Letter from the Government of India { No. 873 A. I. dated 21st May 1884 }

—

The Examiner of Public Works Accounts will see that the charge on connection with the Preeshman's Dredger obtained from England for the Godavari Delta which has been treated in the Home accounts as a final charge under "N. Expenditure on Public Works not classed as Productive" is adjusted in the Indian accounts for 1883-84 to the debit of "N. Expenditure on Productive Public Works-Capital Account"

2. With reference to para 2 of the above letter, it is observed that the differences referred to, are due to the distribution

6

by systems, of the subsequent modifications shown in lump sums in the statements in paras 11 & 12 of the Government of India resolution No 57 A.J. dated 14th March 1884. Should the Government of India still consider this course objectionable, the instructions now given by them will be adhered to in future.

3. Ordered that a Copy of these Proceedings be forwarded to the Government of India for information.

L

30.5

Jan 1884

H.G. No 3 of 87

Forwarded.

Copy sent to Circle I & Circle II for Surveyor Gen. P.W. Accts Revenue Deptt.

13/1

P.W.D. 88/5-Cir 7/6-R+H/5

CM/

232/57

4511.

Govt. of (1884) Madras.

PUBLIC WORKS.

Dated

Read. Encl.

G.O., 6 June 1884, No. 1538-90

- Priestmans Dredger

Ordering with remarks on the charge connected with the ____ Steamer for the Godavari Delta to be adjusted in the Imperial accounts for 1883-84 to the debit of "Expenditure on Productive Public Works - Capital account."

Priestmans Dredger

Forwarding copy of Govt: ordering with remarks on the charge connected with the ____

obtained for the Godavari Delta to be adjusted in the Indian accounts for 1883-84 to the debit of "Expenditure on Productive Public works - Capital account."

Entd in Interest Regr

Notes of Inspection by Superintending Engineer Circle

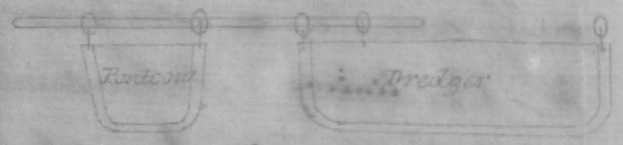
December 1885

Priestmans Dredger. This dredger is now engaged in clearing the Channel Heads at Kally, and the Chief Engineer will be interested to learn that it is now in perfect working order, and that the machinery is worked with perfect ease by Mr Gaetane a slight East Indian lad of 20 years of age, without any assistance whatever

2 On timing Mr Gaetane's work, it was ascertained that, with a short drop, a full bucket of silt per minute was regularly raised and deposited upon a punt along side.

3 The barge on which the dredger has been placed

being built to pass through locks, the width has neces-
-sarily been confined to narrow 15 feet, which is too narrow a width
a full bucket the barge rolls
Considerably, which not
only delays the work but
is liable to damage the
machinery, this rolling
however can very easily
be prevented by lashing
one a pontoon as an outb
rigger alongside, as shewn
in the accompanying sketch,




and the Executive Engineer
in Charge of the Dominion-
-wer am workshops will
submit an estimate at
an early date for one iron
pontoon with the necessary
means for lashing it on
to the dredger.

Mr Gaeta-
-nes' pay being
only Rs 19 per mensem, the
Supdg Engineer Considers that it
might well be raised to say
Rs 25/-. There are one syrang
and four lascars attached
to this dredge this number
seems excessive, and three
men besides the foreman and
Mr Gaetane ought to be
quite sufficient.

4 This dredge having proved
such a success for the Delta
works, this Department
would be glad to work
the similar dredger at
present lying idle at Co-
-canada, if the Marine De-
-partment would allow it
to be handed over tempo-
-rarily, until it may be
required by themselves.

Portable Engine at Gurmara

This portable Engine of 8
horse power by Marshall

and Sons has now been working night and day for about 1½ years, and is in perfect order yet also is a satisfactory machine.

From,
The Supt. Engineer
1st Circle

To The Chief Engineer
Public Works Dept

Dated 9th } December 1886
Recd. 9th }

Notes of Inspection of Priestman's Dredger and Portable Engine at Gunnaram by the Superintending Engineer — Submits —

Seen attn. Asst. Engr.
for Supt.g Engr. 1st Circle

Draft issued
9th December 86

To
The Chief Engineer
Through
The Superintending Engineer
1st Circle

Sir,

I have the honor to report that I visited Gunnaram on the 7th instant and found the Priestman's Dredger and Portable Engine working satisfactorily.

2. The Dredger has been working night and day for about 1½ years and is in perfect order. It is a satisfactory machine.

3. I have the honor to be
Sir
Your most obedient servant
Sd/ [illegible]
Asst. Engr.

The above report which is very satisfactory will be communicated to the Chief Engineer for information; also to the Marine Department for information and consideration with reference to para 4.

2. The Supt.g Engineer will submit an application in proper form for an increase of pay to Mr. Gastine.

Sd/ 4/1/87
Ch. to be put up
marine dept
8-6 I Circle

Sd/ 10/5/87
16-12-85

Submitted respectfully

W. Thwaites
for Mr. Priestman

12/60

10750

Govt. of 1885 Madras.

PUBLIC WORKS.

17/12/85

Dated

Read. Read.

G.O., No. 3

6
4