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(3) Initials of the Referencer _____

MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No. 2567-68 Press
B.P. ~~No.~~ Mis.~~—~~

Dated 10-9-C874 —195—.

Not to be folded or roughly handled

No. 199. Read the following Proceedings of the Government of India in the Public Works Department, (Account—Irrigation,) dated Fort William, 16th June 1874, Nos. 168—78 A—I:—

Classification of expenditure on Irrigation Works.

Read the following papers:—

Public Works Department Circular No. 80 of 1871.
Orders on the North-Western Provinces Irrigation Budget-Estimate for 1872-73.
Letter from the Secy. to Govt., North-Western Provinces, No. 932 I, dated 17th April 1872.
Public Works Department letter No. 182 A—I, dated 19th June 1872.
" " " to Acct. Genl., P W.D., No. 137 A—I, dated 1st June 1873.

Read also the following from Captain P. S. MARINDIN, R.E., Officiating Assistant Secretary, for Joint Secretary to the Government of the North-Western Provinces in the Public Works Department, Irrigation Branch, to the Secretary to the Government of India, Public Works Department, dated 4th December 1873, No. 2,900-I.

REFERRING to correspondence on the subject of new forms for Budget-Estimates ending with our letter No. 182 A—I, dated 19th June 1872, I am directed to forward a copy of a note addressed by the Controller of Public Works Accounts to the Accountant General, in para. 5 of which he comments on the inconvenience of the classification of expenditure laid down by Circular No. 80 of 1871, from which it will be seen that a year's experience of the new forms entirely bears out the opinions expressed by this Government in Colonel Brownlow's letter No. 932-I, dated 17th April 1872.

2. It would seem, too, that the Accounts Branch of the Government of India have modified their views of the question, since in the form for Capital Accounts of canals given at page 8 of the enclosure to Circular No. 19—2 of 1873, the classification of expenditure is in the most essential points the same as that proposed by this Government in the letter above mentioned; in that the expenditure is divided into the two main heads, "Canals" and "Distributing Channels," which are again sub-divided into certain minor heads.

3. As regards the minor distribution, I am to express His Honor's concurrence in the opinion given by the Controller in para. 4 of his note, that it is still too minute, and to propose that there shall be no sub-division of distributaries *in Budget*.

This arrangement, which will save a great deal of correspondence and alteration of assignments, in no way prevents expenditure under sub-heads Preliminary, Land, Masonry Works, Earth-work, being brought out in the Appropriation Reports, because expenditure will be so returned in Sub-Divisional Accounts in accordance with the sub-heads of estimates.

It is also very important to the simplicity and correctness of Revenue Accounts that no subdivision of *repairs* of distributaries should be attempted in budget or estimates. It is impossible to carry it out in reality, owing to their small extent, and to their variable character, whilst the adoption of the practice would add considerably to the Office duties of Sub-divisional Officers, which are already sufficiently heavy.

4. The Accountant General has classed "bungalows at heads of canals" as head-works; but I am to recommend that they should come under buildings, like any other bungalows, on canals, branches, or distributaries.

5. The recommendations now submitted are detailed in the following distribution, which has been drawn up in communication with the Controller, and which is recommended for adoption:—

I.—MAIN CANAL.

A.—PRELIMINARY WORKS.

Surveys and all other expenditure incurred before the detailed estimates are sanctioned, which cannot afterwards be classed with distinct sub-heads of the estimate.

B.—COST OF LAND.

Including all lands occupied by any of the works of the canal except those for which land is directed to be shown separately.

C.—Head-works.

As weirs, head and undersluices and other works constructed in, or on the river, for maintenance of supply, and works for training and embanking the river. (This will not inc the locks at head of canal which came under navigation.)

D.—Regulators.

i. e., all works constructed in the canal for the regulation of supply, except escapes escape heads.

E.—Falls, Weirs, and Rapids.

In main canal, not including the weir in river at head of canal.

F.—Torrent Works.

Including aqueducts, super-passages, inlets, training works, and all other works conn with the passage of torrents. (In this, for instance, would be included the Dhonowrie dam not the regulator).

G.—Bridges and Ferries.

H.—Escapes.

Including land, masonry, and earth-work.

I.—Navigation Works.

Including locks on canal and separate navigation channels, with their land, masonry, earth-works.

J.—Mills.

Including masonry, sluices, machinery, and earth-work of channels.

K.—Buildings.

Permanent and temporary wherever situated. This will include all expenditure on format of head-quarter stations, workshops, &c.

L.—Earth-work.

Excavation, embankments and roadways of main canal and branches.

M.—Plantations.

Including land, where it has been taken up separately from what is required for canal spoil banks.

N.—Tanks and Reservoirs.

In connection with canals.

O.—Miscellaneous.

Experiments and the like.

Note.—Earth-work and excavation of foundations, &c., included in the estimates for works under class I, excepting L; and in classes II and III, excepting C, will be regarded as of those works, and not as "earth-work" (L).

II.—DISTRIBUTARIES.

A.—Preliminary.
B.—Land.
C.—Masonry works, including heads.
L.—Earth-work.

These sub-heads should not be used in *budget*, except for distributaries estimated to more than Rupees 20,000, but should be clearly shown in Appropriation Statements.

III.—DRAINAGE WORKS.

A.—Preliminary.
B.—Land.

6. In the above classification the cost of land is included under the sub-heads "Navigatio "Works" and "Drainage," because it may be an important item in the cost of these works, the main object held in view in making this classification is the convenience of being able ascertain the actual cost of any well defined class of works. The other sub-heads of Main Ca will be little affected by the cost of land, so it is all included in one sub-head for the whole ca

Proceedings of the Madras Government, Public Works Department,
10th September 1874.

7. To illustrate the convenience of these proposals, which are the result of mature consi- deration, His Honor proposes to allow the Irrigation Budget of the coming year to be so prepared as an experiment, if no intimation of objection on the part of the Government of India is received.

Copy of a Note forwarded to the Accountant General, P. W. Dept., on the 21st ultimo.

The following table gives, in an abstract form, the classified outlay on the works of the Agra Canal for and up to the close of 1872-73:—

	Outlay, 1872-73, Extraordinary.	Outlay to close of 1872-73.	
		Extraordinary.	Ordinary.
	Rs. 2,43,659	Rs. 9,52,153	Rs. 431
Head-works	...	3,884	4,329
Main Canal.			
Preliminary operations...	1,048	45,797	
Cost of land...	82,849	1,16,057	
Masonry works ... Weirs and Locks	2,622	2,622	
Regulating bridge	104	104	
Fall	2,39,893	3,74,736*	
Bridges	21,387	80,935	6,320
Buildings	1,12,991	9,18,904	
Earth-work...	49,637	63,152	
Syphon and cut...	80,767	82,178	
Escapes...	19,502	19,943	
Navigation Channels	9,828	13,577	
Plantations ...			
Total Main Canal... ...	6,20,628	17,21,889	10,649
... ...	36,577	40,486	.....
Distributaries...	9,00,864	27,14,528	11,080
Total Agra Canal... ...		27,25,608	

* See note at end.

2. The outlay under head-works and distributaries might also be broken up into land, masonry, earth-work, on works on which the combined outlay under these sub-heads is shown (such as syphon and cut, escape, &c., above). The means for this separation are to be found in Part III. of the Appropriation Account; but the appended table has been abridged on purpose that important result might be brought out on a striking manner.

3. The table further illustrates the classification adopted throughout Part III. It is in fact the same as that followed in the detail of expenditure on Agricultural Works, with two exceptions, *viz.*, weirs and locks, having been estimated for together, are so shown, but the details given will admit of the outlay being separated at any time, and escapes appear immediately above Naviga- tion Channels. The heaviest outlay on an escape is generally on its excavation, or the masonry works along the line, when there are any; its head only is attached to the canal, and as the expenditure on it is comparatively small, it is hardly worthwhile to separate the cost of the head from that of the work. Escapes being off the Main Canal would appear more appropriately after the masonry works and earth-works in and along the main line, and it is on this account that position in the classified list has been altered.

4. Para. 19 of the Accountant General's Circular No. 19-2, dated 11th July 1873, permits of the classification that has been adopted, and agrees closely with that prescribed in the form of

Appropriation Account appended thereto. The classification of works according to the
prescribed in the forms accompanying Public Works Department Circular No. 80 of 187
proved an uncertain and tedious task, and has led to entries of every variety, both
schedules of Executive Engineers and in the sub-journals of this Office. For example, the
a petty work on the Eastern Jumna Canal was thus estimated—

	Rs.
Earth-work in channel	207
Masonry and wood-work	890
Cost of land	189
Contingencies	64 = 1,350

To distribute these items over the main heads fixed by Circular No. 80, and to mix t
with similar items of other estimates, would be able to lose sight of the cost of most works.
true the cost could be ascertained by picking out and putting the items together, but this w
take time and trouble, and the preferable course of setting down the entire outlay ag
estimate has been adopted in such cases. For works in and along the Main Canal, the distinc
between masonry and earth-works can and has been observed, but escapes, distributaries,
works of the main line generally have been treated like petty works, with this difference
the cost of land, masonry, and earth-work has been also shown, when such sub-division
possible or necessary, thus while means are afforded for ascertaining the cost under these he
the amounts of estimates and the actual outlay on works have not been scattered over
Appropriation Account, nor has it been necessary to recapitulate remarks and references, w
a rigid adherence to details under land, masonry and earth-work would have involved.

5. The classification under Circular No. 80 of 1871 for the Capital Account of canals
been found in practice to be defective. If estimates exhibit, as required by the Code, the e
cost of a work under land, masonry and earth-work, the separation of the outlay under the h
ings must lead to trouble and confusion. It was not intended perhaps that the outlay or
estimates should be thus broken up, but no safe limit can be fixed to indicate where separatio
or is not necessary, and it is even difficult to determine at times whether a work on earthen bu
for instance, faced, or an earthen channel, lined partially with masonry or a crib and boulder
thrown across the bed of a canal ought to appear under masonry or earth-work. With all th
elements of uncertainty it will be readily understood why the new classification does not answ
and I shall be glad to see it altered. If it were made to accord with that shown in the Appropri
tion Account as it should in my opinion, weirs, buildings, &c., at the head of a canal would find
place under "head-works," instead of temporary works and masonry works.

6. I have dwelt at length on this subject bearing, as it does, on the ground-work of the ne
Capital Accounts. Even with the classification shown in the table for the Agra Canal, there wi
be some difficulty in framing the Capital Accounts for the older canals, but this difficulty will b
enhanced if the classification under Circular No. 80 of 1871 is to be strictly observed. In th
hope, therefore, of a change, and in being able at leisure to complete the classification of the pas
outlay on the older canals, which will admit of all the headings in the new Capital Accounts bein
correctly filled in, I have deferred the distinct entries required to be made by para. 15 of Circula
No. 19—2 for the older canals under each sub-head for "other works."

7. The outlay for the year on the main line of the Ganges Canal has been shown apart a
required by para. 16 from that incurred on the four branches,—Futtehgurh, Boolundshuhur,
Cawnpoor, and Etawah; but no distinction has been made between remodelling and other works
The budget does not distinguish between the two, and any distribution of expenditure that could
be made would, therefore, be uncertain. With exception of irrigating lines and a few other works,
the works on the Ganges Canal may all appear under remodelling, the canal having been looked
upon as complete years ago. The branches were not quite so, but there has been no outlay on thei
extension during the year.

NOTE.—In the statement forwarded to Joint Secretary with this office $\frac{1}{1\,1\,5}$ I, dated 21s
July 1873, the total expenditure on the Agra Canal was shown as Rs. 27,24,038, but Rs. 1,57

ce been added on account of two bridges,—Mudunpoor and Mowaie. The value of
derat s collected had, in previous years, been charged to these works, but the sites having been
prepa d, adjustment was effected, and the amount is now included in the general receipt of
is rec al under Capital.

RESOLUTION.—The classification of expenditure on Irrigation works originally
cribed in Public Works Department Circular No. 80 of 1871, having been in
ting sufficiently long to enable the Government of India to judge of it by
rience. It is shown that some change is necessary. The proposals made by
Government, North-Western Provinces, seem suitable to the purpose in view,
t is necessary to add two more heads of account to the list, *viz.* (1), Tanks or
rvoirs (not in connection with Canals) and (2) River Embankments, and to add
ub-head of Irrigation outlets under the main head Rajbuhas.

2. By these additions the classification of expenditure on Irrigation works
tand as follows:—

—MAIN CANAL AND BRANCHES (MAIN CANAL AND EACH BRANCH BEING ALWAYS KEPT QUITE DISTINCT)—
- A.—Preliminary Works.
- B.—Cost of land.
- C.—Head-works.
- D.—Regulators.
- E.—Falls, Weirs, and Rapids.
- F.—Torrent Works.
- G.—Bridges and Ferries.
- H.—Escapes.
- I.—Navigation Works.
- J.—Mills.
- K.—Buildings.
- L.—Earth-work (excluding earth-work relating to the preceding heads).
- M.—Plantations.
- N.—Tanks and Reservoirs.
- O.—Miscellaneous.

II.—DISTRIBUTARIES—
- A.—Preliminary.
- B.—Land.
- C.—Masonry Works.
- L.—Earth-work.
- P.—Irrigation outlets.

III.—DRAINAGE WORKS—
- A.—Preliminary.
- B.—Land.
- C.—Masonry Works.
- L.—Earth-works.

IV.—ESTABLISHMENT—
- Q.—Direction.
- R.—Executive.
- S.—Medical.
- T.—Survey.

V.—Tools and Plant—
U.—Navigation.
V.—Machinery for Mills.
W.—Miscellaneous.

VI.—Suspense Balances—
Stock.
Stock Purchases and Sales.
Miscellaneous Advances.
London Invoices.
London Stores.

3. In the case of tanks or reservoirs not in connection with canals classification of expenditure might be as follows:—

A.—Preliminary,
B.—Land,
C.—Masonry Works,
D.—Earth-work,
E.—Establishment,
F.—Tools and Plant,

and where necessary Suspense Balances.

4. A similar classification might be adopted in the case of River Embar

5. By this classification the outlay on Irrigation projects will be grou main heads and heads of account, there being no necessity for any fu division of the outlay except under Establishment, in which case the outl be sub-divided as at present. The arrangement prescribed in the patte of Appropriation Capital and Revenue Account under which the outlay on Branch Canal is shown distinct from the Main Canal will, of course, con to be adhered to.

6. Before issuing definite orders that the proposals made by the Govern North-Western Provinces, as modified by this Resolution, should be carried effect, the Government of India would be glad to receive an expression of opini the matter from the several Governments concerned. One point on whic Governor-General in Council would wish to receive definite information is, whe in case the modified classification is sanctioned, there will be any difficulty i classifying the expenditure previously incurred on Irrigation works, and which have been accounted for under the heads already laid down.

7 In connection with this question of classification of outlay, it is nece to note that the estimates for works should be prepared and classified accordi the heads of account that may be laid down. Particular attention is invited to point.

8. The question raised by the Government, North-Western Provinces, a the degree of detail necessary in the Budget-Estimate, will form the subject separate Resolution.

Order.—Ordered, that this Resolution be communicated to the Governme and Administrations noted in margin, for the purpose indica in para. 6.

The Governments of Madras, Bombay, Bengal, and Punjab.
The Chief Commissioners of the Central Provinces, British Burmah, and Mysore.
The Resident at Hyderabad
The Governor General's Agent, Rajpootana

Ordered also, that a copy be forwarded to the Government, North-Western Provinces, and to the Accountant-General, Public Works Department, for information.

(Signed) C. H. DICKENS, Colonel, R.A.,
Secretary to the Government of India.

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200. Order thereon, 10th September 1874, No. 2,567.

IRRIGATION, No. 27.
Account.

The Government observe that the revised classification detailed in the Resolution of the Government of India is not fully applicable to Irrigation works in this Presidency. To take the Godavery Delta Works for instance, head-works should not come under I—main canal and branches, but should, it would seem, be a separate main head, as the anicut supplies three main canals in different sections of the delta. It is also not clear whether D regulators is intended to include the head sluices of main canals, or whether these should be considered as pertaining to C—head-works. On many of the canals the only weirs or falls are block weirs, and these appear to belong therefore rather to I—navigation works than to E—falls, weirs and rapids. Torrent works (F) are unknown in the deltas, where are but few instances of their use in any part of the country, and nowhere connection with works for which detailed accounts will be kept. There are no (J); on the other hand in some instances inlets and outlets for passing cross age are extensively used by themselves or in connection with aqueducts or or tunnels, and though outlets may be included under escapes, H, inlets could apparently appropriately be so classified. Again many escapes (H) are also ntially regulators (D).

2. One classification in detail could not, it is thought, be made applicable to greatly differing works in various parts of this Presidency. Were the minor sification, as to descriptions of masonry works, carried out, the list would have made considerably larger, and a selection only would be used on particular ects.

3. Such being the case His Excellency the Governor in Council is of opinion a more general classification, without details of masonry works, will be more licable to the circumstances of Irrigation works of this Presidency, and that the owing would probably be suitable:—

I.—Anicuts and head-works (including head sluices and scouring sluices).
A.—Preliminary.
B.—Land
C—Masonry Works.
D.—Buildings (belonging to a project generally).

II.—Main Canals and Branches—
A.—Preliminary.
B.—Land.
C.—Masonry Works.
D.—Earth-works.
E.—Navigation Works.
F—Buildings (belonging to particular canals).

G —Tanks and Reservoirs (connected with Canals)
H —*Plantations*
I.—*Miscellaneous*

In the case of deltas each section of a delta would have its own sep classification and be complete in itself. Buildings belonging to a section gener and any other general expenditure would have to be shown before the exhibitic the main and branch canals in detail.

4. The classification given by the Government of India as regards distr taries, drainage works, establishment and suspense balances is appropriate. sub-division of tools and plant may with advantage be here termed navigat machinery, and miscellaneous. Mills are not in use, but other kinds of machi such as machine tools are.

5. Tank and reservoir expenditure may conveniently be classified under six sub-heads given by the Government of India, and a similar classification wi appropriate for river embankments.

6. It is observed that in this Presidency the minor sub-heads of classific have not been adopted, their use having been left optional, and it is not anticip therefore that there will be any difficulty, as regards past expenditure, in intro ing the revised arrangements detailed in this order, should they be approved b Government of India, but these papers will be communicated to the Cont

Godavery, Kistna, Nellore, Chingleput, Bellary, Tanjore, and Coimbatore.

of Public Works Accounts and several District Engineers as per m for any remarks they may wish to

7. Ordered that a copy of these Proceedings be transmitted to the Go ment of India for information, pending a further reply to the reference of a Government.

(True Extract.)

(Signed) JOHN MULLINS, Lieut.-Colonel, R.E.,
Joint Secretary to Governmen

To the District Engineer, Godavery.
" " Nellore.
" Superintending Engineers, Kistna, Chingleput, Bellary, Tanjore, and Coimbatore.
" Officiating Controller of Public Works Accounts.

Exd. E. C. Shunker.
Spare Copies

Cobt. of 1874

PUBLIC WO

To

THE H[illegible]

&c

Dated September 1874.

Read.

G., O., 10th September 1874.

SEPTEMBER

Nos. 199-200

Irrigation Works.—Passing
the Proceedings of the Gove
India communicating resolution
the classification of expenditu
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C.—Head-works.

As weirs, head and cut-locks and other works constructed in, or across the river for the maintenance of supply, and works for training and embanking the river. (This will include the locks at head of canal which rarely come under navigation.)

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i. e., all works constructed in the canal for the regulation of supply, except escape heads.

E.—Falls, Weirs, and Rapids.

In main canal, not including the weir in river at head of canal.

F.—Tunnels Works.

Including aqueducts, super-passages, inlets, training works, and all other works connected with the passage of torrents. (In this, for instance, would be included the Dhoon tunnel, but not the regulator).

G.—Bridges and Ferries

H.—Escapes.

Including land, masonry, and earth-work.

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* See note at end.

The outlay under head-works and distributaries might also be broken up into land, y, earth-work, on works on which the combined outlay under these sub-heads is shown as syphon and cut, escape, &c., above). The means for this separation are to be found in II. of the Appropriation Account; but the appended table has been abridged on purpose that tant result might be brought out on a striking manner.

The table further illustrates the classification adopted throughout Part III. It is in fact me as that followed in the detail of expenditure on Agricultural Works, with two exceptions, of the outlay being separated at any time, and escapes appear immediately above Naviga- eirs and locks, having been estimated for together, are so shown, but the details given will Channels. The heaviest outlay on an escape is generally on its excavation, or the masonry along the line, when there are any; its head only is attached to the canal, and as the diture on it is comparatively small, it is hardly worthwhile to separate the cost of the head that of the work. Escapes being off the Main Canal would appear more appropriately after masonry works and earth-works in and along the main line, and it is on this account that on in the classified list has been altered.

4. Para. 19 of the Accountant General's Circular No. 19-2, dated 11th July 1873, permits classification that has been adopted, and agrees closely with that prescribed in the form of

Appropriation Account attached thereto. The classification of works according to the forms accompanying Public Works Department Circular No. 80 of 1871 has proved an uncertain and tedious task, and has led to evasion of every kind. The schedules of Executive Engineers and in the subsidiaries of the Office. For example, a petty work on the Eastern Jumna Canal was thus estimated—

	Rs.
Earth-work in channel	[illegible]
Masonry and wood-work	2,7
Cost of land	[illegible]
Contingencies	[illegible]

To distribute these items over the main heads facility Circular No. 80, and with similar items of other estimates, would be able to lose sight of the cost of [illegible] true the cost could be ascertained by [illegible] and putting the items together, [illegible] take time and trouble, and the preferable course of setting down the entire estimate has been adopted in such cases. For works in and along the Main Canal the between masonry and earth-works can and has been observed, but escapes, during works of the main line generally have been treated like petty works, with this the cost of land, masonry, and earth-work has been also shown, when such subdi possible or necessary, thus while means are afforded for ascertaining the cost under the Appropriation Account, nor has it been necessary to recapitulate remarks and references the amounts of estimates and the actual outlay on works have not been scattered a rigid adherence to details under land, masonry and earth-work would have involved

5. The classification under Circular No. 80 of 1871 for the Capital Account of been found in practice to be defective. If estimates exhibit, as required by the Code, cost of a work under land, masonry and earth-work, the separation of the outlay under ings must lead to trouble and confusion. It was not intended perhaps that the out estimates should be thus broken up, but no safe limit can be fixed to indicate where sepa or is not necessary, and it is even difficult to determine at times whether a work on earth for instance, faced, or an earthen channel, lined partially with masonry or a crib and bou thrown across the bed of a canal ought to appear under masonry or earth-work. With elements of uncertainty it will be readily understood why the new classification does no and I shall be glad to see it altered. If it were made to accord with that shown in the Ap tion Account as it should in my opinion, weirs, buildings, &c., at the head of a canal wou place under "head-works," instead of temporary works and masonry works.

6. I have dwelt at length on this subject bearing, as it does, on the ground-work o Capital Accounts. Even with the classification shown in the table for the Agra Canal, th be some difficulty in framing the Capital Accounts for the older canals, but this difficult enhanced if the classification under Circular No. 80 of 1871 is to be strictly observed. hope, therefore, of a change, and in being able at leisure to complete the classification of t outlay on the older canals, which will admit of all the headings in the new Capital Accoun correctly filled in, I have deferred the distinct entries required to be made by para. 15 of No. 19—2 for the older canals under each sub-head for "other works."

7. The outlay for the year on the main line of the Ganges Canal has been shown a required by para. 16 from that incurred on the four branches,—Futtehgurh, Boolunds Cawnpoor, and Etawah; but no distinction has been made between remodelling and other The budget does not distinguish between the two, and any distribution of expenditure tha be made would, therefore, be uncertain. With exception of irrigating lines and a few other the works on the Ganges Canal may all appear under remodelling, the canal having been upon as complete years ago. The branches were not quite so, but there has been no outlay o extension during the year.

NOTE.—In the statement forwarded to Joint Secretary with this office [illegible] I, dated July 1873, the total expenditure on the Agra Canal was shown as Rs. 27,24,038, but Rs.

ince been added on account of two bridges,—Mudunpoor and Mowaie. The value of ials collected had, in previous years, been charged to these works, but the sites having been oned, adjustment was effected, and the amount is now included in the general receipt of Canal under Capital.

RESOLUTION.—The classification of expenditure on Irrigation works originally ribed in Public Works Department Circular No. 80 of 1871, having been in ng sufficiently long to enable the Government of India to judge of it by ience. It is shown that some change is necessary. The proposals made by overnment, North-Western Provinces, seem suitable to the purpose in view, is necessary to add two more heads of account to the list, *viz.* (1), Tanks or voirs (not in connection with Canals) and (2) River Embankments, and to add b-head of Irrigation outlets under the main head Rajbuhas.

By these additions the classification of expenditure on Irrigation works and as follows:—

—MAIN CANAL AND BRANCHES (MAIN CANAL AND EACH BRANCH BEING ALWAYS KEPT QUITE DISTINCT)—
- A.—Preliminary Works.
- B.—Cost of land.
- C.—Head-works.
- D.—Regulators.
- E.—Falls, Weirs, and Rapids.
- F.—Torrent Works.
- G.—Bridges and Ferries.
- H.—Escapes.
- I.—Navigation Works.
- J.—Mills.
- K.—Buildings.
- L.—Earth-work (excluding earth-work relating to the preceding heads).
- M.—Plantations.
- N.—Tanks and Reservoirs.
- O.—Miscellaneous.

—DISTRIBUTARIES—
- A.—Preliminary.
- B.—Land.
- C.—Masonry Works.
- L.—Earth-work.
- P.—Irrigation outlets.

—DRAINAGE WORKS—
- A.—Preliminary.
- B.—Land.
- C.—Masonry Works.
- L.—Earth-works.

—ESTABLISHMENT—
- Q.—Direction.
- R.—Executive.
- S.—Medical.
- T.—Survey.

V.—Tools and Plant—
U.—Navigation.
V.—Machinery for Mills.
W.—Miscellaneous.

VI.—Suspense Balances—
Stock.
Stock Purchases and Sales.
Miscellaneous Advances.
London Invoices.
London Stores.

3. In the case of tanks or reservoirs not in connection with canals, the classification of expenditure might be as follows:—

A—Preliminary,
B—Land,
C.—Masonry Works,
D.—Earth-work,
E.—Establishment,
F.—Tools and Plant,

and where necessary Suspense Balances.

4. A similar classification might be adopted in the case of River Embankments.

5. By this classification the outlay on Irrigation projects will be grouped into main heads and heads of account, there being no necessity for any further sub-division of the outlay except under Establishment, in which case the outlay should be sub-divided as at present. The arrangement prescribed in the pattern form of Appropriation Capital and Revenue Account under which the outlay on each Branch Canal is shown distinct from the Main Canal will, of course, continue to be adhered to.

6. Before issuing definite orders that the proposals made by the Government, North-Western Provinces, as modified by this Resolution, should be carried into effect, the Government of India would be glad to receive an expression of opinion in the matter from the several Governments concerned. One point on which the Governor-General in Council would wish to receive definite information is, whether, in case the modified classification is sanctioned, there will be any difficulty in re-classifying the expenditure previously incurred on Irrigation works, and which may have been accounted for under the heads already laid down.

7. In connection with this question of classification of outlay, it is necessary to note that the estimates for works should be prepared and classified according to the heads of account that may be laid down. Particular attention is invited to this point.

8. The question raised by the Government, North-Western Provinces, as to the degree of detail necessary in the Budget-Estimate, will form the subject of a separate Resolution.

Order.—Ordered, that this Resolution be communicated to the Governments and Administrations noted in the margin, for the purpose indicated in para. 6.

The Governments of Madras, Bombay, Bengal, and Punjab.
The Chief Commissioners of the Central Provinces, British Burmah, and Mysore.
The Resident at Hyderabad.
The Governor General's Agent, Rajpootana.

Ordered also, that a copy be forwarded to the Government, North-Western Provinces, and to the Accountant-General, Public Works Department, for information.

(Signed) C. H. DICKENS, Colonel, R.A.,
Secretary to the Government of India.

No. 200. Order thereon, 10th September 1874, No. 2,567.

IRRIGATION, No. 27.
Account.

The Government observe that the revised classification detailed in the Resolution of the Government of India is not fully applicable to Irrigation works in this Presidency. To take the Godavery Delta Works for instance, C—head-works should not come under I—main canal and branches, but should, it would seem, be a separate main head, as the anicut supplies three main canals in different sections of the delta. It is also not clear whether D regulators is intended to include the head sluices of main canals, or whether these should be considered as appertaining to C—head-works. On many of the canals the only weirs or falls are lock weirs, and these appear to belong therefore rather to I—navigation works than to E—falls, weirs and rapids. Torrent works (F) are unknown in the deltas, and there are but few instances of their use in any part of the country, and nowhere in connection with works for which detailed accounts will be kept. There are no mills (J); on the other hand in some instances inlets and outlets for passing cross drainage are extensively used by themselves or in connection with aqueducts or under tunnels, and though outlets may be included under escapes, H, inlets could not apparently appropriately be so classified. Again many escapes (H) are also essentially regulators (D).

2. One classification in detail could not, it is thought, be made applicable to the greatly differing works in various parts of this Presidency. Were the minor classification, as to descriptions of masonry works, carried out, the list would have to be made considerably larger, and a selection only would be used on particular projects.

3. Such being the case His Excellency the Governor in Council is of opinion that a more general classification, without details of masonry works, will be more applicable to the circumstances of Irrigation works of this Presidency, and that the following would probably be suitable:—

I.—Anicuts and head-works (including head sluices and scouring sluices).
A.—Preliminary.
B.—Land
C—Masonry Works.
D.—Buildings (belonging to a project generally).

II.—Main Canals and Branches—
A.—Preliminary.
B—Land.
C.—Masonry Works.
D.—Earth-works.
E.—Navigation Works.
F—Buildings (belonging to particular canals).

G.—Tanks and Reservoirs (connected with Canals)
H.—Plantations.
I.—Miscellaneous

In the case of deltas each section of a delta would have its own separate classification and be complete in itself. Buildings belonging to a section generally, and any other general expenditure would have to be shown before the exhibition of the main and branch canals in detail.

4. The classification given by the Government of India as regards distributaries, drainage works, establishment and suspense balances is appropriate. The sub-division of tools and plant may with advantage be here termed navigation, machinery, and miscellaneous. Mills are not in use, but other kinds of machinery such as machine tools are.

5. Tank and reservoir expenditure may conveniently be classified under the six sub-heads given by the Government of India, and a similar classification will be appropriate for river embankments.

6. It is observed that in this Presidency the minor sub-heads of classification have not been adopted, their use having been left optional, and it is not anticipated therefore that there will be any difficulty, as regards past expenditure, in introducing the revised arrangements detailed in this order, should they be approved by the Government of India, but these papers will be communicated to the Controller of Public Works Accounts and to the several District Engineers as per margin for any remarks they may wish to offer.

Godavery, Kistna, Nellore, Chingleput, Bellary, Tanjore, and Coimbatore.

7. Ordered that a copy of these Proceedings be transmitted to the Government of India for information, pending a further reply to the reference of that Government.

(True Extract.)

(Signed) JOHN MULLINS, Lieut.-Colonel, R.E.,
Joint Secretary to Government.

No 201. (Docket No. 2568, dated 10th September 1874.)

Copy of the above forwarded to the Government of India.

(True Extract.)

Lieut.-Colonel, R.E.,
Joint Secretary to Government.

Exd. E. C. Shunker.

Spare Copies

Public Works Department

Proceedings of the Madras Government

Read the following

From the Govt of India

W.D. No 168—78-A-1

dated 16th June 1874

2567.

The Government

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classification detailed in

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-ble

I Ancient and lead works (including headsluices
forming sluices).
A. Preliminary
B. Land
C. Masonry works
D. Buildings (belonging to private persons)

II Main Canals & Branches.
A. Preliminary
B. Land
C. Masonry works
D. Earthworks
E. Navigation works
F. Buildings (belonging to Canals)
G. Tanks & Reservoirs (connected with Canals)
H. Plantations
I. Miscellaneous

In the case of deltas
each section of a delta
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7. Ordered that a copy of these proceedings be transmitted to the Govt. of India for information, pending a further reply to the reference of that Govt. -

P. G. No 2568 dy.

Copy of the above forwarded to the Government of India. 199-201

Godavery, Kistna, Nellore, Cuddapah, Bellary, Tanjore and Coimbatore.

ISC of GO No 2567 dispd to the undermentioned Dts on the 12-8-75 -

Ganjam
Vizagapatam
Cuddapah
Kurnool
Presidency
N Arcot
S Arcot
Salem
Trichinopoly
Malabar
Madura
Tinnevelly

To Dt Engrs Godavery Kistna Nellore Cuddapah Bellary Tanjore Chingleput & Coimbatore Coats - 2. Copies dispd to all 21/9/74. 2. Copies dispd to Coats 18/9/74.

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3872

Govt. of {1874} Madras.

PUBLIC WORKS.

To

The Secretary
Govt. of India

Dated

Rec'd.

Encl.

G. O. 10 Sept. 1874. No. 25-53
25-68

Nos. 199-201.

Irrigation Works

Forwarding copy of Proceedings on the Resolution of the Govt. of India regarding the Classification of Expenditure on Irrigation Works—

Passing orders on the Proceedings of the Govt. of India, communicating Resolution regarding the classification of expenditure on Irrigation Works—

See G.O.—1763
" 10 Sept.—53
Send a copy of