9443

Public Works (1896) Department.

Print 6 cm
each party

G.O., No 1071-72

DATED 24th October 1896

24/10

[Despatch Abstract.]

Six months' Estimate: Ordered that the Statement showing the — of receipts & expenditure in the Irrigation Branch for 1896-97 and the rough estimate for 1897-98, be submitted to the Govt of India.

Ditto: Forwarding Proc: embodying the Statement showing the — of receipts & expenditure in the Irrigation Branch for 1896-97 & the rough estimate for 1897-98.

1/10
7/1

To Audit

[P. W. Dft. 50—15-4-96.]

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

No. 771 D. dated 21st September 1876.

PUBLIC WORKS DEPARTMENT,
IRRIGATION BRANCH.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the

READ the following

Despl. Madras Govt. Revenue Dept. No. 373 dated 29 July 1876.

Communicated to the
Superintending Engineer, Sixth
Circle.

3/9/76

Recd 8/9/76

Issued 12/9/76

To The Supt. Engineer, Sixth Circle. √
" Chief Engineer for Irrign. √
" Examiner, P.W. Accts. √

Recd 20/9/76

No 771 I, dated 21st September 1896.

E. I. Form No 1—1,000—27-11-95.

Public works (1896) Department

Government (1896) of Madras.

REVENUE.

Current Numbers 7838

Recd. 1-9-96 } 1896.
Regd.

Enclosures.

Spare copies. 10

G.O., No. 373, 29th July 1896.

JULY.

Periyar water.

Passing orders on Board's Proceedings issuing instructions regarding the charge to be made for the — supplied to tanks in the inam and zamindari villages.

SCB
P&I 2-9-96 Dr to Gt

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

Read—the following Proceedings of the Board of Revenue (Revenue Settlement, Land Records and Agriculture), dated 29th May 1896, Mis. No. 2600 :—

Read—the following letter from the Collector of Madura, to the Secretary to the Commissioner of Revenue Settlement, Land Records and Agriculture, dated 3rd February 1896, Ref. on C. No. 5103-Gl. of 1895 :—

In forwarding copies of the Executive Engineer's letter, Mis. No. 1043, dated 27th November 1895, and my reply thereto, also of letter, No. 887-M., dated 20th December 1895, from the Superintending Engineer, VI Circle, with its enclosures, I have the honour to request the Board's instructions as to the treatment of zamindari and inam lands in connection with the distribution of Periyár water.

2. Such lands may receive water—

(*a*) on application,
(*b*) without application because we cannot help it.

(*a*) *On Application.*—Supply can (and I think should) only be given by filling tanks, and not directly from channels. We can therefore only deal with the proprietors of tanks or holders of entire ayacuts, and not with individual tenants who hold portion of ayacuts.

For second crop the charge is Rs. 3 per acre, for the payment of which, upon all cultivation under the tank, the applicant must be responsible. Supply for first crop was not contemplated, but there will, for some years at least, be water available which it would be a pity to waste. The difficulty lies in fixing the charge since the Executive Engineer informs me that it is impossible to measure the amount supplied. I can only suggest that the rate per acre (which should cover the entire ayacut, whether cultivated or not) should be fixed in each case by agreement between the Executive Engineer and the applicant, according to the amount of water to be supplied, if this can be roughly estimated with sufficient accuracy.

(*b*) *Water involuntarily supplied.*—Until irrigation direct from channels is substituted for the tank system, it will be impossible to avoid giving an involuntary supply in many cases. Tanks often run in chains filled each by the overflow of the one above it: so in order to fill say Government tanks Nos. 3, 4 and 6, it may be necessary to fill inam tanks 2 and 5. I do not see how we can charge for this even for second crop unless by special agreement with the proprietors, the benefit to whom will vary greatly year by year according to the nature of the season unless the Executive Engineer can come to an arrangement with the proprietors for a term of years, the only course, I believe, will be to take care that such cases of involuntary supply are as few as possible and take early steps to make other arrangements in the case of these.

3. Zamindari and inam lands will also benefit from the Periyár water in other ways, *e.g.*, where their supply is taken by channel from the river in which the Periyár water runs, or where they receive the drainage from Government lands. Here too, I think, that no charge can be made either for first or second crop so long as cultivation is not extended.

4. If cultivation of first crop is extended owing to supply of Periyár water beyond existing wet or mamul wet area, whichever is largest, I presume that water-rate should be charged upon such extension at the same rate as in Government villages: also that water-rate should be charged, if land not hitherto cultivated with second crop is so cultivated, though in this case extension owing to Periyár water will be more difficult to prove.

5. I also presume that all such extension can, if necessary, be checked by imposition of a penal rate and that all cases of unauthorized taking of water by the unlawful act of the owner or cultivator should also be treated with penal water-rate.

6. In course of time other questions will no doubt arise, but I beg to know whether my views on the above general question are correct.

Resolution—dated 29th May 1896, Mis. No. 2600.

In the first case mentioned by the Collector, that is, where water is supplied to private tanks on the application of the proprietors, for the irrigation of first crop, the simplest plan appears to be to levy an acreage rate on the entire area irrigated under the works. It will, of course, not be possible to vary the rate with reference to the supply given in each case, nor, having regard to the fact that the tank irrigation is only supplemented, would it be fair to charge the full rate of Rs. 5 an acre, as in the case of Government and minor inam lands commanded by the Periyár works. The Board considers that an uniform rate of Rs. 4 an acre may be charged in all cases where water is taken, with permission, for first crop wet, no extra charge being levied, if, owing to the limited capacity of the tanks, it becomes necessary to fill them a second time, to mature the crop. A separate charge will be levied for the supply given for a second crop and also for crops which remain on the ground beyond the period of a first crop.

2. In the second case mentioned by the Collector, no charge can be enforced as the "water is involuntarily supplied," that is, it is carried through private tanks, without the application of the proprietors, with a view to supply some Government works. The Board understands, however, that such cases are very few and that it might be possible to divert the distributary channels or make other arrangements for filling the Government tanks, if the proprietors of the private works do not consent to pay a reasonable sum annually in consideration of the advantage derived by them. The Collector is requested to report further on the matter.

(True Copy and Extract.)

(Signed) P. RAJARATNA MUDALIAR,
Secretary.

To the Secretary to Government, Revenue Department.
„ Collector of Madura.

Enclosures.

Copy of communication from the Executive Engineer, Madura Division, to the Collector of Madura, No. 1043-M., dated 27th November 1895.

I have the honour to forward herewith two applications from private individuals to have Periyár water supplied to their tanks, one direct to me and the other through the Deputy Collector. I request you will kindly inform me whether water can be supplied on such applications and what the charge per acre would be.

2. I enclose for your perusal a copy of a letter I am sending to the Superintending Engineer, VI Circle, regarding zamin and whole inam lands and request the favour of your views in the matter.

3. I have as yet issued no orders to supply these tanks.

Copy of communication from the Collector of Madura, to the Executive Engineer, Madura Division, No. 5103, dated 11th December 1895.

Referring to your letter of the 27th ultimo, No. 1043-M., I have the honour to state that it is not intended to supply water for first crops to zamin and whole inam tanks. If, however, proprietors should ask for such supply, and it should be considered expedient to comply with the request, it would be necessary to come to an agreement in each case as to the price to be paid per so many cubic feet delivered and to measure the amount supplied. The lands in such villages are not surveyed and settled as in Government villages and no acreage rate can be fixed. For second crop, on the other hand, a uniform rate of Rs. 3 per acre will be charged if water is supplied.

If in supplying Government tanks, water is unintentionally and without application supplied to zamin and whole inam tanks I do not see how we can charge for it. The water, however, is absolutely at the disposal of Government to give or withhold at pleasure, and it would obviously be better to supply those tanks first from which there would be no wastage into private tanks. The applications are returned and I would suggest that the matter can but be discussed at a personal interview.

From the Executive Engineer, Madura Division, No. 405-S.E., dated 26th November 1895.

I have the honour to forward, herewith, a map of the area commanded by the Periyár canal and branch channels showing the zamin and whole inam villages situated therein.

2. It would simplify the regulation of water if it could be supplied on payment to these lands for first crop, as well as second crop. In G.O., No. 153, dated 15th February 1892, it is contemplated that water will be available for only 8,000 acres for second crop cultivation.

3. It will be impossible to keep Periyár water out of these lands as they will store all the water that finds its way to the drainages after being used for the supply of Government lands above. The only way would be not to supply the latter where they are surrounded by private lands, but I do not know whether we can refuse a supply to Government villages.

4. I think the matter should be brought to the notice of Government and some arrangement made for guidance in the distribution and regulation of water.

No. 826-M.D.

Copy submitted to the Chief Engineer, Public Works Department, for instructions. The zamindari, inam and ryotwari villages are so intermingled that it will be quite impossible to prevent the two former classes from benefiting largely by the Periyár water. When this is the case it is presumed that the wet lands may be treated as directed in the case of minor inams by G.O., No. 153-R., dated 15th February 1892, and that the conversion of dry into wet may be prohibited or prevented by penal assessment. The total wet area stated to be 17,474 acres in the papers printed with G.O., No. 153, Revenue, dated 15th February 1892.

7th December 1895. (Signed) W. HUGHES,
Suptg. Engineer, VI Circle.

Memo. No. 4005-C.

It is not clear wherein lies the difficulty of refusing to supply water to zamindari or inam lands.

2. In the event of water being available, as it will very probably be during the next few years as the land required for using the whole of the water in Government villages will not be prepared, there is no reason why it should not be supplied on the terms stated for minor inams in G.O., No. 153, Revenue of 15th February 1892; if it is not available all that has to be done is to refuse to supply it.

3. The fact that zamindari or inam villages will benefit by the use of water after it has been used on Government lands does not seem important and the undersigned does not at present see any reason for trying to prevent such use.

4. The Collector should, however, be consulted on the matter, and a further reference made if that officer considers it necessary, the idea of refusing water to Government villages because it may afterwards be used again, cannot be entertained.

Madras, 14th December 1895. (Signed) J. PENNYCUICK, Col., R E.,
Chief Engr., Public Works Department.

To the Superintending Engineer, VI Circle.

Copy of communication from the Superintending Engineer, VI Circle, to the Collector of Madura, No. 887-M., dated 20th December 1895.

In forwarding herewith copies of correspondence noted in the margin, I have the honour to request that you will be good enough to inform me whether, when Periyár water is supplied to zamindari villages without being applied for, it may be charged for on the terms laid down for minor inams in G.O., No. 153, Revenue, of 15th February 1892, also whether extension in zamindari villages can be prevented, if necessary.

1. Letter from Executive Engineer, Madura Division, No. 405-S E., dated 26th November 1895, bearing Superintending Engineer's endorsement, No. 826-M.D. of 7th December 1895.
2. Chief Engineer's No. 4005-C. of 14th December 1895.

2. The favour of an early reply is requested.

Order—No. 373, Revenue, dated 29th July 1896.

Irrigation No. 6.

With reference to paragraph 1 of the Board's Proceedings, the Government considers that applications for the supply of water to private tanks should be submitted to the Collector through the Executive Engineer who should be in a position to know whether a sufficient supply is available for irrigating the whole ayacut and filling the tanks twice if necessary. The Government approves the Board's proposal to levy a uniform water-rate of Rs. 4 an acre in all cases where water is taken with permission for a first wet crop, no extra charge being levied if, owing to the limited capacity of the tanks, it is necessary to fill them a second time. The separate charge leviable in respect of a supply given for a second crop or a crop which remains on the ground beyond the usual period should be Rs. 3 an acre.

2. Paragraph 2 of the Board's Proceedings which relates to the charge to be levied in respect of involuntary supplies of water will be considered when the report called for from the Collector is submitted to Government.

3. It is observed that the Board has not passed specific orders upon the Collector's presumption that water-rate should be charged on any extension of cultivation due to the use of Periyár water and that penal rates are leviable in cases where it may be necessary to check such extensions or where water may be taken without permission. The Government doubts whether it would be legal to charge for extensions of wet cultivation in zamindari lands supplied by private channels from the river. The case differs from that of the Gódávari and Kistna deltas where water is supplied not direct from the river but by means of Government channels. There is of course no objection to the levy of penal rates if water is taken intentionally without permission as by means of newly excavated channels to lands which had hitherto enjoyed no supply from the river. The Board will however be requested to report whether there are many cases of channels flowing from the river to zamindari lands and whether much of the Periyár water is likely to be lost in this way.

(True Extract.)

for Ag. Secretary to Government.

To the Board of Revenue (Revenue Settlement, Land Records and Agriculture).
„ the Public Works Department.

Exd. Md. Pahilvan.

60 Copies.

Letter from the Executive Engineer, Madura Division, No 405 dt Dated 26th November 1895, to the Superintending Engineer, 6th Circle:—

I have the honor to forward herewith a map of the area commanded by the Periyar Canal and branch Channels showing the Inamin and whole Inam villages situated therein.

2. It would simplify the regulation of the water if it could be supplied on payment to these lands for 1st Crop, as well as 2nd Crop. In Ly O. $\frac{153}{15-2-92}$ it is Contemplated that water will be available for only 8000 acres for 2nd Crop Cultivation.

3. It will be impossible to keep Periyar water out of these lands as they will store all the water that finds its way to the drainages after being used for the supply of Government lands above. The only way would be not to supply

supply the latter where they are surround-
-ed with perwaike lands, but I do not know
whether we can refuse a supply to Gov-
-ernment villages.

4 - I think the matter should be brought
to the notice of Government and some ar-
-rangement made for guidance in the
distribution and regulation of water.

No 826 md,

Copy, submitted to the Chief
Engineer, P.W.D for instructions. The
Zemindari, Inam and Ryotwari villages
are so intermingled that it will be quite
impossible to prevent the two former
classes from benefiting largely by the
Periyar water. When this is the case it
is presumed that the wet lands may be
treated as directed in the case of Minor
Inams by G.O. No 153 R, dated 15th February
1892 and that the conversion of dry into
wet may be prohibited or promoted by
penal assessment. The total wet area
stated

Enclosure
1 Tracing
(to be returned)

stated to be 17474 acres in the paper
printed with G.O. No 153 Rev. dated
15th February 1892.

Supt. Irrign. Operations. 7
Trichinopoly.
7th December 1895.

W. Hughes.
Superintending Engineer
for Circle.

No. 252 Ld/14-3-92
to 9 Ld/24-1-90

ENCLOSURE No. 97

Encls/plan.

Rec: 9.12.95

From

The Supdt. Engineer
Vizagl.

To

The Chief Engineer
P.W.D.

No 826 md

Dated 7 December 1895
Disp 7/-

Sir,

Zemindary & Inam lands commanded by Peringa channel: —

Submitting a map shewing the area of — & requesting instructions as to the distribution of Peringa water to these.

for orders
CMB
11/12
DLW

Chief

in the villages with
respect to the supply water
after it has been used
for purposes which does
not seem important,
and the undesirable class
of persons
who use any means for
trying to prevent such
use.

The Collector should
therefore be consulted on
the matter, and on
further report should
if that Officer considers
it necessary; the rules
for supplying water to
private villages become
if any alterations be
used appear, cannot
be determined —

S

cd/ 6 & 11

Letter No 826 dated
7.12.95 -

It is not clear whether
this the difficulty is
supposed to arise with
the Zemindary or in some
lands -

In the event of water
being available, as it
may possibly with the closing
of the west sluices, as the
land supplied by the water
in private villages will
not be proposed, there
is no reason why it
should not be supplied
on the terms stated in
rules in para in G.O.
153 (Revenue) of 15th Feby
1894; if it is not available
all that can be done
is to refuse to supply it -
The petitioners

No 4005 Cdf/14 - December 95

Memorandum.

From the Supply Engineer VI Circle No 826 M.D. d/7 Dec 95

It is not clear wherein lies the difficulty of refusing to supply water to zemindary or inam lands.

2. In the event of water being available, as it very probably will be during the next few years as the land required for using the whole of the water in Government Village will not be prepared, there is no reason why it should not be supplied on the terms stated for minor inams in G.O. (Revenue) No 153 of 15th February 1892; if it

is not available all
that has to be done is to
refuse to supply it
3. The fact that zemindary
or inam villages will benefit
by the use of water after
it has been used on
Government lands does
not seem important, and the
undersigned does not
at present see any reason
for buying to prevent
such use
4. The Collector should
however be consulted in the
matter, and a further
reference made if that
officer considers it necessary.
The idea of refusing water
to Government villages because
it may afterwards be
used again, cannot be
entertained.

S. EW

No. 4005 Cd/ 14th December 1895

DESPATCH
18 DEC. 95

S. EW
with one enclosure held.

26/12

E. D. No. C 1897 13/12/95

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following Proceedings of the Board of Revenue (Land Revenue), dated 30th September 1891, No. 594-A :—

THE HON. MR. J. GROSE.
MR. H. F. CLOGSTOUN.
MR. G. MCWATTERS.

Read—again Proceedings of the Board of Revenue (Land Revenue), dated 21st February 1890, Mis. No. 1166.

ABSTRACT.—Communicating to the Collector of Madura Government Order, Revenue Department, calling for report on certain points referred to in the note by the Honorable Sir Charles A. Elliot on the Periyár project embodied in Government Order, dated 24th January 1890, No. 49-I (P.W).

Read—also the following letter from E. TURNER, Esq., Collector of Madura, to the Secretary to the Commissioners of Land Revenue, dated 23rd August 1890, No. 347 :—

Adverting to Board's Proceedings, Mis. No. 63, of the 1st February 1890, and Mis. No. 1161 of the 21st idem, I have the honour to submit my report with such statements as have been found necessary.

2. The information called for in the first of the Proceedings quoted above is given in statement No. I, which is based on statement No. II. For further information on this point I beg to refer the Board to paragraph 18 of this report.

3. The Government of India has, in its Proceedings of the 4th January 1890, communicated with Government Order, No. 49 I. (P.W.) of the 24th January last, read in the Board's Proceedings, No. 1166, dated 21st February 1890, under reply, called for information on the following points :—

(*a*) Actual rates of assessment and the actual area of the land likely to come under Periyár irrigation with reference to settlement rates, &c.

(*b*) A revised estimate of the financial effects of the scheme.

(*c*) Whether Rs. 4 or 6 an acre may be fixed as water-tax as regards the dry inam and zemindari lands.

(*d*) Estimate of second-crop cultivation based on present knowledge.

(*e*) Selling rates of tank-beds.

(*f*) Question as to the propriety of selling the occupancy right in the waste lands.

(*g*) What is the extent of waste lands available for sale now with reference to existing facts.

(*h*) The result of the action said by Mr. Bliss to have been taken with reference to the orders restricting the grant of pattas as regards lands in the villages affected by the Periyár.

4. As regards (*a*), *vide* paragraphs 19 to 35 and the statements Nos. 2 to 7.

5. As regards (*b*), *vide* paragraphs 47 and 48 and the statements Nos. 6 and 7.

6. As regards (*c*), *vide* paragraphs 20 and 28.

7. As regards (*d*), *vide* paragraph 38 and the statements Nos. 2 and 6.

8. As regards (*e*), *vide* paragraph 43 and the statement No. 5.

NOTE.—There were certain obvious miscalculations and discrepancies in the Collector's statements Nos. II and III and in the figures quoted therefrom in his report. These have been rectified and adjusted and the correct figures are printed in thick type throughout the Collector's report.

9. As regards (*f*), *vide* paragraphs 42 to 45.

10. As regards (*g*), *vide* paragraphs 18 and 43 and the statements Nos. 2 and 5.

11. As regards (*h*), *vide* paragraph 46 and the statements 1, 2 and 5.

12. Before dealing with the several statements submitted herewith, I think it desirable to bring to notice some general points bearing thereon.

13. In paragraph 103 of his letter, No. 3293 (A), of the 15th November 1884, the Director of Revenue Settlement gave it as his opinion that on the completion of the Periyár project all irrigation affected by it should be included in the first group and that it should be notified at the introduction of the settlement that lands now classed in the 2nd, 3rd, &c., groups would, if hereafter affected by the Periyár project, be classed and assessed at first group rates. The Board having in its order, No. 661, dated 21st February 1885, concurred in his proposal, the same was approved of by Government in paragraph 11 of the Government Order, No. 881, Revenue, dated 30th July 1885. This was accordingly notified by the Settlement Department in the third supplement to the *Madura District Gazette*, dated 19th October 1885, and the statements have therefore been prepared with reference to it, the areas being assessed at the corresponding rates of the first or the highest group and the excess over the present assessment being taken to be due to the project.

14. From paragraph 3 of Mr. Clogstoun's report communicated with Board's Proceedings, Mis. No. 5442, dated 12th April 1877, and correspondence previous and subsequent to it, it would appear that the extent of land which the channels are capable of irrigating is only 150,000 acres. This, however, it appears, can be raised to 175,000 acres as is evident from paragraph 256 of Colonel Pennycuick's report in 1882 and paragraphs 3 and 4 of his letter embodied in Government Order, No. 355-I., dated 27th April 1883, Public Works, and the Periyár water supplemented by the Vaigai can, I think, irrigate about 200,000 acres at the most, as about 25,000 acres of ryotwar lands on the north bank alone are irrigated by the existing sources. The statements have been prepared on the supposition that 200,000 acres can be irrigated at the most.

15. I beg also to state that it will appear from the accompanying statements and the following paragraphs that the extent of cultivation under first and second crops in the villages on the north bank alone amounts to the above figure, so that I doubt whether sufficient water will be available for the villages on the south bank. My report is therefore in detail as regards the villages on the north bank, separate statements being, however, submitted for the villages on the south bank also for the information of the Board and Government.

16. The number of villages affected by the Periyár on the north bank and dealt with by Mr. Clogstoun in his report on the scheme is 132 (reduced to 89 in the settlement by amalgamation, &c.,) in the Madura taluk under ryotwar and 122 villages under inam and zemindari and in the Melúr taluk 20 under ryotwar and 5 inam. It seems that about 12 villages under ryotwar and 7 villages inam and zemindari in the Madura taluk and 13 villages under ryotwar and 6 villages under inam and zemindari in the Melúr taluk may be added to the above number as they are villages that may be affected by the Periyár and I cannot account for their omission by Mr. Clogstoun. To avoid confusion and for comparison sake, I have shown separately in the statements the transactions relating to these additional villages.

17. Information for every village affected has now been collected and statements herewith submitted have been prepared with reference to the villagewar statements previously prepared.

18. To deal with the accounts as regards villages on the north bank.

Statement No. I.—The total extent of land available for disposal in the villages dealt with by Mr. Clogstoun amounts to 28,14$\frac{5}{+}$ acres, of which 12,6$\frac{30}{29}$ are dry and 3,936 wet and 11,579 acres are tank-bed porambokes. The lands temporarily assigned are 253 acres under dry and 125 under wet, aggregating acres 378 in all. It will be seen that temporary assignments have not been made on a large scale—*vide* also this office letter, No. 291, dated 22nd July 1890. The extent of wet lands held on inam or permanent tenure is given below :—

Held on inam tenure.	Held on permanent tenure.	Total.
ACS.	ACS.	ACS.
19,298	3,217	22,515

19. *Statement No. II.*—This gives detailed particulars of all classes of lands affected by the project. The number of villages now given as regards Madura taluk is 101 * against 132 given in Mr. Clogstoun's report and the difference is due to several small ryotwari villages having been clubbed together in the survey. One village called Managiri, which is on the northern bank, appears to have been treated as one of the villages on the south bank in 1876 and this has been included in the present statement as one of the villages on the north bank. Inam and zemindari villages are 129, of which 122 are those reported upon by Mr. Clogstoun and the rest are newly added villages. Melúr taluk has 20 villages under ryotwar with additional 13 villages and 5 inam villages with the additional 6 villages.

* 89 referred to in Mr. Clogstoun's report; 12 newly added.

20. *Area irrigable in the tract to the north of the Vaigai—Dry land.*—The total extent of occupied and unoccupied dry lands in both the taluks is 57,532 acres including lands temporarily assigned. From this total area a deduction of 25 per cent., which appears reasonable, has been made on account of dry lands which are not irrigable owing to their high level and land required for main channels, &c. The net area irrigable amounts to 43,148 acres and the present assessment thereon to 41,6$\frac{57}{66}$. Column 17 of the statement shows water-tax at Rs. 4 per acre, while column 18 shows the amount of probable increased assessment arrived at with reference to 1st-group rates notified in the third supplement to the *Madura District Gazette*, dated 19th October 1885. The question is whether water-rate should be charged for the use of water or group rates. As channels will be perennial and as almost the whole extent of the net area will, I think, be converted into wet, it appears reasonable to adopt group assessment, which is accordingly shown in column 18 of the statement. But it may be thought desirable to levy water-rate instead of group assessment on dry lands; so water-tax also is separately shown in column 17 of the statement at Rs. 4 per acre. Rs. 4 sanctioned in Standing Order No. 4 as water-tax per acre is, I think, a reasonable amount and it does not appear desirable or expedient to raise it on account of the Periyár. The assessment due to Periyár in the ryotwar villages under lands now classed as dry is shown in the statement given below :—

Dry.

—	Extent.	Present assessment.	First crop. Periyár assessment. Water-tax.	First crop. Periyár assessment. Group assessment.	First crop. Assessment due to Periyár. Difference between 5 and 3.	Second crop. Extent.	Second crop. Present assessment.
			4	5	6	7	8
1	2	3					
	ACS.	RS.	RS.	RS.	RS.	ACS.	RS.
In villages dealt with by Mr. Clogstoun...	34,829	86 / 33,4$\frac{}{99}$	16 / 1,39,3$\frac{}{20}$	631 / 2,19,$\frac{}{253}$	1,86,145 / $\frac{}{1,85,754}$	17,415	...
In villages now ascertained to be influenced by the scheme.	8,319	71 / 8,1$\frac{}{67}$	5 / 33,27$\frac{}{+}$	461 / 53,$\frac{}{393}$	45,290 / $\frac{}{45,226}$	4,159	...
Total ...	43,148	57 / 41,6$\frac{}{66}$	1,72,591	2,73,092 / $\frac{}{2,72,646}$	2,31,435 / $\frac{}{2,30,980}$	21,574	...

Dry—cont.

—	Second crop—*cont.* Periyár assessment. Water-tax.	Second crop—*cont.* Periyár assessment. Group assessment.	Second-crop assessment due to Periyar. Water-tax (Difference between 8 and 9.)	Second-crop assessment due to Periyar. Group assessment (Difference between 8 and 10.)	Total due to Periyar. Extent (2 and 7).	Total due to Periyar. Water-tax (4 and 11).	Total due to Periyar. Group assessment (6 and 12).
	9	10	11	12	13	14	15
	RS.	RS.	RS.	RS.		RS.	RS.
In villages dealt with by Mr. Clogstoun...	34,829 ~~69,660~~	54,907 ~~54,813~~	34,829 ~~69,660~~	907 54,~~813~~	52,244	1,74,145 ~~2,55,414~~	2,41,052 ~~2,40,567~~
In villages now ascertained to be influenced by the scheme.	8,319 ~~16,636~~	13,365 ~~13,348~~	8,319 ~~16,636~~	13,365 ~~13,348~~	12,478	41,594 ~~61,862~~	655 58,~~574~~
Total ...	43,148 ~~86,296~~	273 68,~~161~~	43,148 ~~86,296~~	272 68,~~161~~	64,722	2,15,739 ~~3,17,276~~	2,99,707 ~~2,99,141~~

The total extent of dry land occupied and unoccupied given in Mr. Clogstoun's report, paragraph 32, as coming under Periyár project, is 46,146 acres, the Periyár assessment on which amounts to Rs. 3,09,322 while the present extent is 34,829 acres, with Periyár assessment of Rs. 2,19,~~253~~ (631). The difference of 11,317 acres in extent between the figures now taken and Mr. Clogstoun's figures is due to 25 per cent. deduction being allowed on account of high level, &c., and to survey, with corresponding decrease in assessment.

21. *Wet lands.*—The total extent of wet lands in ryotwar villages is 43,446 acres under occupied and 4,464 under unoccupied, aggregating 47,910 acres. The present assessment thereon amounts to Rs. 1,77,78~~1~~ (22) and the Periyár assessment which has been calculated at the rates sanctioned for the first group in accordance with the Government Order contained in Board's Proceedings, No. 2491, dated 27th August 1885, is Rs. 2,78,~~839~~ (747). The amount due to the project is shown below:—

Wet.

—	Extent.	Present assessment.	Periyár assessment, group rates.	Second-crop charge. Extent.	Second-crop charge. Present assessment.
1	2	3	4	5	6
	ACS.	RS.	RS.	ACS.	RS.
Villages dealt with by Mr. Clogstoun ...	41,179	265 1,56,~~318~~	122 2,41,~~313~~	20,589	11,790
Villages now included.	6,731	57 21,~~463~~	625 37,~~526~~	6 3,~~365~~	515
Total ...	47,910	22 1,77,78~~1~~	747 2,78,~~839~~	5 23,~~954~~	12,305

—	Second-crop charge—*cont.* Periyár assessment.	Total Periyar assessment. Extent—columns 2 and 5.	Total Periyar assessment. Assessment—columns 4 and 7.	Present assessment. Total assessment—columns 3 and 6.	Difference due to Periyár—columns 9—10.
	7	8	9	10	11
	RS.	ACS.	RS.	RS.	RS.
Villages dealt with by Mr. Clogstoun ...	280 60,~~328~~	61,768	402 3,01,~~641~~	055 1,68,~~108~~	347 1,33,~~533~~
Villages now included.	9,407 ~~9,382~~	7 10,~~096~~	47,032 ~~46,908~~	2 21,~~978~~	25,060 ~~24,930~~
Total ...	687 69,~~710~~	5 71,~~864~~	434 3,48,~~549~~	27 1,90,~~086~~	07 1,58,~~463~~

22. The extent of wet lands appearing in Mr. Clogstoun's report, paragraph 32, is 40,017 with the Periyár assessment of Rs. 2,88,585, while the present extent is 41,179 (121) acres with Periyár assessment of Rs. 2,41,~~313~~. The difference of 1,162 acres between the extent as shown in Mr. Clogstoun's report and the present statements is, I think, due to survey and the conversion of punjah into nunjah.

23. The total extent of lands under dry and wet in ryotwar villages is given below with its present and future assessments.

Villages.	Total extent dry including 2nd-crop extent.	Present assessment, dry.	Periyár assessment.	Difference due to Periyár.	Total extent wet including 2nd crop.
1	2	3	4	5	6
	ACS.	RS.	RS.	RS.	ACS.
Number of villages dealt with by Mr. Clogstoun.	52,244	86 33,4~~99~~	538 2,74,~~066~~	2,41,052 ~~2,40,567~~	61,768
Now added	12,478	71 8,1~~67~~	66,826 ~~66,741~~	655 58,~~574~~	7 10,~~096~~
Total ...	64,722	57 41,~~666~~	3,41,364 3,~~40,807~~	707 2,99,~~141~~	5 71,~~864~~

Villages.	Present assessment.	Periyár assessment.	Difference due to Periyár.	Grand total, extent.	Assessment due to Periyár.
	7	8	9	10	11
	RS.	RS.	RS.		RS.
Number of villages dealt with by Mr. Clogstoun.	055 1,68,~~108~~	402 3,01,~~641~~	347 1,33,~~533~~	114,012	399 3,74,~~100~~
Now added	2 21,~~978~~	47,032 ~~46,908~~	25,060 ~~24,930~~	5 22,~~574~~	715 83,~~504~~
Total ...	27 1,90,~~086~~	434 3,48,~~549~~	07 1,58,~~463~~	7 136,~~586~~	4,58,114 ~~4,57,604~~

If the second-crop charge not taken into account by Mr. Clogstoun in paragraph 32 of his report be deducted from Rs. 5,75,~~707~~ (940) shown in columns 4 and 8 of the statement above appended, the net amount both under dry and wet comes to Rs. 4,60,~~566~~ (752) on 76,008 acres against Rs. 5,97,907 shown as Periyár rate in his report on 86,163

acres of land. The decrease under both extent and assessment is due to deduction of 25 per cent. for the reasons given in paragraph 20 *supra*.

24. *Tank-beds.*—The number of tanks in the villages dealt with by Mr. Clogstoun is 1,067, * from which 5 tanks are to be deducted as it is probable from the information available from the Department of Public Works that these will have to be retained, the rest being taken as available for allotment for cultivation. As has been done by Mr. Clogstoun, 40 per cent. (paragraph 32 of his report) of the area of the remaining tank-beds has been deducted for lands on high level, bunds, for channels, paths, pasture, &c., and the remaining area, viz., 11,579 acres, taken for the purpose of assessment. The highest first group rate (wet) in each village concerned has been applied to tank-beds as these are in most cases of superior soil and well situated for wet cultivation. The assessment thus arrived at as regards the tank-beds is Rs. 82,0$\frac{70}{54}$ † which added to the expected second-crop charge of Rs. 20,51$\frac{8}{3}$ ‡ raises it to Rs. 1,02,5$\frac{88}{67}$. This again added to the assessment, Rs. 17,$\frac{896}{920}$, as regards tank-beds in villages now ascertained to be affected by the Periyár project amounts to Rs. 1,20,48$\frac{4}{7}$, the whole of which should be treated as the income due to the Periyár project.

* Madura 309
Melúr small tanks 758
Total ... 1,067

Mr. Clogstoun's villages ... 11,579
New villages 1,993

† Mr. Clogstoun ... ... Rs. 82,0$\frac{70}{54}$
New ... ... 14,3$\frac{17}{36}$

‡ Mr. Clogstoun ... ... Rs. 20,51$\frac{8}{3}$
New ... ... 3,5$\frac{79}{84}$

25. Mr. Clogstoun's report gives the area of tank-beds as 9,196 acres ($\frac{1}{5}$ of tank-beds) with Periyár assessment of Rs. 73,568 at Rs. 8 per acre. The increase in extent is due to survey and settlement.

26. The total Periyár assessment as regards dry, wet and tank-beds is given below without second-crop charge :—

—	Number of villages.	Periyar. Dry. Extent.	Dry. Group assessment.	Wet. Extent.	Wet. Assessment.
1	2	3	4	5	6
		ACS.	RS.	ACS.	RS.
Villages dealt with by Mr. Clogstoun	109	34,829	2,19,$\frac{631}{253}$	41,179	2,41,$\frac{122}{313}$
Add do. additional villages	25	8,319	53,$\frac{461}{393}$	6,731	$\frac{625}{526}$
	134	43,148	2,73,092 $\frac{}{2,72,646}$	47,910	747 2,78,$\frac{}{839}$
Deduct present rate ...	...	...	57 41,666	...	22 1,77,$\frac{}{784}$
Balance due to Periyár ...	...	...	2,31,435 $\frac{}{2,30,980}$	...	25 1,01,0$\frac{}{58}$

—	Periyar—*cont.* Tank beds. Extent.	Tank beds. Assessment.	Total.	Water-rate as regards dry lands.
	7	8	9	10
	ACS.	RS.	ACS.	RS.
Villages dealt with by Mr. Clogstoun	11,579	82,0$\frac{70}{54}$	87,587	1,39,3$\frac{16}{20}$
Add do. additional villages	1,993	14,3$\frac{17}{36}$	17,043	33,27$\frac{5}{4}$
	13,572	96,3$\frac{87}{90}$	104,630	1,72,591
Deduct present rate ...	...	...	...	...
Balance due to Periyár ...	...	96,3$\frac{87}{90}$	...	1,72,591

27. *Minor inams.*—The following shows the amount due to the project on account of minor inam (dry) in ryotwar villages :—

—	Number of villages.	Extent.	Present assessment.	Water-tax at Rs. 4 per acre.
1	2	3	4	5
		ACS.	RS.	
Mr. Clogstoun's villages ...	109	3,856 $\frac{}{4,327}$	3,940 $\frac{}{4,423}$	15,424 $\frac{}{17,310}$
Do. additional villages	25	991 $\frac{}{520}$	992 $\frac{}{510}$	3,965 $\frac{}{2,079}$
Total ...	134	4,847	4,93$\frac{2}{3}$	19,389

—	2nd-crop water-tax. Extent.	2nd-crop water-tax. Assessment.	Total extent, columns 3 and 6.	Assessment total, columns 5 and 7.	Difference between 4 and 9.
	6	7	8	9	10
	ACS.	RS.	ACS.	RS.	ACS.
Mr. Clogstoun's villages ...	1,928 $\frac{}{2,164}$	3,856 $\frac{}{4,328}$	5,784 $\frac{}{6,491}$	19,280 $\frac{}{21,638}$	15,340 $\frac{}{17,215}$
Do. additional villages	496 $\frac{}{260}$	991 $\frac{}{520}$	1,487 $\frac{}{780}$	4,956 $\frac{}{2,599}$	3,964 $\frac{}{2,089}$
Total ...	2,424	4,84$\frac{7}{8}$	7,271	24,23$\frac{6}{7}$	19,304

28. It is a question whether the dry inams watered by Periyár water should be charged with water-rate at Rs. 4 an acre or with the first group rates according to the classification of the soil. I think the imposition of water-rate is a proper course as is

usually done at present in the case of dry inams for which Government water is used. To avoid further reference, a column is opened in the form to show group assessment also. The extent of minor inams dry as per Mr. Clougstoun's report is 3,400 acres with a water-rate of Rs. 20,400 at Rs. 6 per acre. For the reasons given in paragraph 20 above, I think 4 Rs. rate is a proper one instead of Rs. 6 which appears prohibitive.

29. Extent of minor inams wet is 5,041 * acres, the Periyár assessment on which amounts to Rs. 29,937 † according to the highest group rate, the difference of Rs. 8,918 between the latter and the present assessment (Rs. 21,019) being treated as the amount due to Periyár.

	Acs.
* Mr. Clogstoun New	4,308
	733
	25,594
† Mr. Clogstoun	25,644
New	4,293

Rs. 8,918 added to Rs. 7,484, being the amount due to the project under second-crop charge, raises it to Rs. 16,402. Mr. Clogstoun has not taken into account the assessment on irrigated inam lands apparently on the ground that wet inams are entitled to Government water free, but I should think that the collection of some tax on this class of lands is a proper charge, as these lands which have now to depend upon an uncertain supply can, on the introduction of the Periyár scheme, not only secure certainty of supply of water, but also will be certainly improved by superior irrigation at the cost of Government, justifying the demand of increased assessment in proportion to the increased value thus imparted—*vide* also paragraph 2 of Board's Standing Order No. 123. It may perhaps be thought that water-tax only at Rs. 4 per acre as in the case of dry inams should be levied, but I think the levying of the difference between the Periyár assessment and the present assessment is the proper course to pursue in charging the inamdars of wet lands.

30. The total assessment due to Periyár on account of minor inams is Rupees 38,560 as shown below :—

—	Number of villages.	Total extent.	Dry Periyár assessment including second crop	Wet Periyár assessment.	Total.	Deduct present assessment.	Balance due to Periyár.
1	2	3	4	5	6	7	8
Number of villages dealt with by Mr. Clogstoun ...	109	8,164 / 8,635	19,280 / 21,638	31,993 / 32,056	51,273 / 53,694	*24,377 / 22,845	26,896 / 30,849
Additional villages ...	25	1,724 / 1,253	4,956 / 2,599	5,365	10,321 / 7,964	3,589 / 3,107	6,732 / 4,857
Total ...	134	9,888	24,237	37,421	61,658	*27,966 / 25,952	33,628 / 35,706
Add taram assessment on dry inams (included in column 7) ...							4,932 / 4,128
Total ...							38,560 / 39,834

* Inclusive of the present second-crop assessment of Rs. 2,035.

31. *Whole inam and zemindari villages.*—The number of villages dealt with by Mr. Clogstoun is 127 (122 Madura taluk and 5 Melúr taluk). The total extent of dry lands irrigable by Periyár water, both occupied and unoccupied, is 15,465 acres.

Water-tax on this at Rs. 4 per acre amounts to Rs. 61,862 and this added to 2nd-crop charge, Rs. 15,465, comes to Rs. 77,327, which is the Periyár assessment.

32. Wet lands in inam and zemindari villages are 17,474 acres in area and the present assessment thereon is Rs. 53,865, while the group assessment on the same amounts to Rs. 1,04,711, the difference between the latter and the former is the amount due to Periyár in addition to Rs. 26,178 (2nd-crop charge). For the reasons given in paragraph 29 as regards minor inams, water-rate as regards dry land and group assessment as regards wet lands have been adopted. The inam, &c., villages depend upon rainfed tanks and upon the surplus water of tanks fed by jungle streams, and there appears no doubt that the inamdars will take advantage of Periyár water and thus obtain benefits from the scheme. It will also enable them to break up their tank beds and convert them into the best wet lands. In view to this, I think it will be well to give inamdars and zemindars notice of the additional value these lands will receive by the introduction of the scheme and of their consequent liability to pay tax therefor.

33. Mr. Clogstoun takes into account only dry lands in inam and zemindari villages (viz., 15,210 acres) and excludes the wet lands (10,845 acres) on the ground that it will be possible to levy water-rate on dry lands only, but for the reasons given in paragraph 32 above, wet lands are liable to the payment of Periyár assessment. This item of receipt from wet lands must, however, be given up if it turns out, as is probable, that there will not be water enough to irrigate wet lands in the inam and zemindari villages without neglecting the interests of ryots in ryotwari villages who have superior claim to Government water.

34. The extent of tank beds in zemindari and inam lands which will certainly be broken up on the introduction of the scheme should also, I think, be taken into account, but this item also will probably have to be given up for the above reasons.

35. Total assessment due to Periyár for whole inam and zemindari villages as regards dry lands alone is given below :—

—	Number of villages.	Extent dry.	Present assessment.	Periyár assessment including 2nd crop.	Difference.
Villages dealt with by Mr. Clogstoun ...	127	15,465	16,957	77,327	60,370
Do. additional	13	2,669	2,936	13,344	10,408
Total ...	140	18,134	19,893	90,671	70,778

36. I must not omit to report here that the extent of wet in whole inam and zemindari villages given in Mr. Clogstoun's report (paragraph 37) is 10,815 acres, whereas according to the accounts now furnished it is 14,462 acres. It is not known to what this difference is due except it be owing to the survey of whole inam villages or to the improvements carried out by inamdars, &c., to these villages. I have in my letter No. 204, dated 26th May 1890, embodied in Government Order, No. 531, dated 9th July 1890, alluded to this subject, and I hope to be able to check for the future all encroachments by inamdars on the use of Government water.

37. Annexed is the statement showing the results arrived at by calculating the revenue due to the Periyár in the manner detailed above for the ryotwar and inam villages.

Items.	1st crop.		2nd crop.		Total.		Deduct present assessment on occupied lands including 2nd-crop charge.	Balance due to the project.
	Extent.	Assessment.	Extent.	Assessment.	Extent.	Assessment.		
	Acs.	Rs.	Acs.	Rs.	Acs.	Rs.	Rs.	Rs.
Ryotwar including tank-beds—								
Villages reported on by Mr. Clogstoun	87,587	6,42,620	43,792	1,35,705	131,379	6,67,533	1,80,109	4,98,419
New villages	17,043	1,05,255	8,522	1,419	25,565	1,06,674	25,862	1,05,892
Total ..	104,630	6,47,875	52,314	1,37,124	156,944	7,85,000	971	6,04,311
Minor inams—								
Villages reported on by Mr. Clogstoun	8,164	50,416	4,082	13,322	12,246	63,738	24,377	39,223
New villages	1,724	10,734	862	2,998	2,586	13,732	3,889	9,843
Total ..	9,888	61,647	4,944	16,320	14,832	77,470	27,966	49,066
Whole inam and zemindari villages—								
Villages reported on by Mr. Clogstoun	15,466	61,864	7,733	15,464	23,199	77,328	..	77,326
New villages	2,669	10,675	1,335	2,670	4,004	13,345	..	13,345
Total ..	18,135	72,537	9,068	18,134	27,203	90,673	..	90,671
Total—								
Villages reported on by Mr. Clogstoun	111,217	6,55,298	55,607	1,63,891	166,824	8,19,189	2,04,486	6,14,971
New villages	21,436	1,26,664	10,719	31,706	32,155	1,58,370	451	1,29,080
Total deducting tank-bed in ryotwar villages—	132,653	7,81,959	66,326	1,95,597	198,979	9,77,559	2,33,937	7,44,051
Villages reported on by Mr. Clogstoun	99,638	5,73,344	49,819	1,43,373	149,457	7,16,717	2,04,486	5,12,231
New villages	19,443	1,12,325	9,722	28,127	29,165	1,40,452	451	1,11,14
Total ..	119,081	6,85,669	59,541	1,71,500	178,622	8,57,169	2,33,937	6,23,567

33. It will be seen from the above that the total extent of lands both under the first and second crops under ryotwar and tank-beds and inams amounts to 198,979 acres against 200,000 acres, the utmost extent which the Periyár channels are considered capable of irrigating, even leaving out of account wet lands in whole inam and zemindari villages.

39. Before concluding my remarks on Statement No. II, I beg to state that, considering all circumstances, I have taken for second-crop cultivation 50 per cent. of the first-crop extent as regards ryotwar, tank-beds and inam lands.

40. *Statement No. III.*—This statement shows the present and Periyár assessments as regards ryotwar, minor inams and tank-beds under different rates in the first group. The Periyár assessment amounts to Rs. 7,09,521 against the present assessment of Rs. 2,45,399.

41. *Statement No. IV.*—This statement shows the extent of land under different rates of the first group as compared with those shown in Mr. Clogstoun's report, paragraph 25. The total extent shows a decrease of 10,155 acres in extent with a decrease of Rs. 1,37,344 in assessment, the reason for the former being due to survey and settlement and 25 per cent. deduction under dry on account of high level, &c., and that for the latter to the above causes as also to classification of lands under proper soils and rates of assessment with reference to the actual area and rates of assessment in the settlement. The last three rates are lower than the lowest rate (Rs. 5) shown in Mr. Clogstoun's report. The rate for water alone being Rs. 4 per acre, it seems expedient to treat the lands falling under the rates, Rs. 3½ and Rs. 2½, as liable to water-tax only instead of taram assessment. The difference will, however, be trifling and amounts to only Rs. 1,435, nor do I think that water-rate can be rightly imposed if the lands concerned are wet. As Mr. Bliss observed in paragraph 7 of his letter No. 1917, dated 15th August 1876, to the Director of Revenue Settlement, communicated with Board's Proceedings, No. 3250, dated 22nd December 1876, it may, I think, be taken that these lands, though of inferior sort, will be irrigated; because when the country is covered with channels, it will be difficult to exclude any particular lands from irrigation.

42. In paragraph 15 of Sir Charles Elliot's note, he wishes us to consider the feasibility of Colonel Pennycuick's suggestion to sell the occupancy right in the waste land to be brought under cultivation. The preferential right of villagers to occupy waste land within their village is generally acted upon and the occupancy right is not ordinarily sold. This claim on the part of the ryots does not however appear to have been formally and authoritatively recognised. The old darkhast rules did not allow the sale of waste lands under any circumstances, but under the new rules such sales are allowed when there are conflicting claims. All waste lands are presumably the property of Government, and it may be considered that it is open to it to sell the occupancy right in them when and where it chooses. But I submit that the measure will become unpopular unless the sale-proceeds are utilized towards some common object as shown below. The case of waste lands affected by the project may, I think, be treated as an exceptional one. There are waste lands available for cultivation in most of the villages which have not been taken up by the ryots. The major portion of this is of inferior quality and it is probable that these lands would have remained waste for ever unless they are taken up under the Project. It is Periyár water that will impart any value to the lands; and if they are sought for cultivation, it will be entirely on account of the project on which Government will have incurred a large outlay. The resident ryots are neither numerous nor rich enough to cultivate all the available waste within the limits of the village. The result of disposing of the lands under the darkhast rules will be that the ryots will speculate in land and the profits arising from the project will fall to the sowcar (money lender). The question has been fully discussed by Mr. Puckle in his letter No. 742, dated 30th December 1873, recorded in Board's Proceedings, No. 31, dated 10th January 1874, and the course proposed has been approved of by the Board of Revenue. That tank-bed porambokes

are the absolute property of Government and can be sold in auction to the highest bidder is, I think, undoubted.

43. *Statement No. V.*—The enclosed statement No. 5 gives in detail the total area of unoccupied waste land and tank-bed poramboke available for cultivation and the prices that may be realised by the sale of them. The rates per acre have been fixed after mature consideration and after considering the circumstances of each locality; the prices are, I think, moderately estimated. The total amount expected to be realised from waste lands is Rs. 5,84,160 and from tank-beds Rs. 6,41,133. It will be seen from paragraph 48 *infra* that the direct receipts of the project are calculated to yield ultimately a net return of 8·4 per cent. on the capital outlay. A portion of these indirect receipts may therefore be utilised in the construction of field and drainage channels and village roads, &c., half of the sale-proceeds of waste lands though not the whole and one-fourth of those of tank-beds being assigned for this purpose.

44. Subsidiary channels do not appear to have been estimated for in the project. They are, I suppose, to be left to the villagers themselves to construct. The poverty of the ryots, especially in Mélur, and want of co-operation will always be a bar to these works being executed by the villagers within a reasonable period of time. As the main and branch channels will be of no use without the smaller ones to take water to and drain the fields, Government may have to lose for some years the revenue of the lands commanded by these channels. This loss can be prevented only by the subsidiary channels being laid out at once by the officers of Government; and as the requisite funds cannot come out of the poverty-stricken ryots, the only alternative by which to avert the loss to Government and to confer on the people the full benefits of the Periyár Project is by utilising a fourth of the sale-proceeds of tank-beds and half the sale-proceeds of waste lands for the purpose of making the smaller channels, &c. This, I think, is a legitimate appropriation of the funds, and as it has been sanctioned in the case of the Srívaikuntham anicut in the Tinnevelly district, there can be no objection to the same course being followed in the present case.

45. The other item of expenditure proposed is on village roads. The Periyár irrigated area is deficient in communications, and the existing village roads, cart-tracks and footpaths are crossed in numerous places by the net-work of Periyár channels, rendering necessary the construction of a large number of culverts and aqueducts; in several instances new tracks and deviations have to be made and the land therefor acquired. The improvements in these communications are necessitated in a great measure by the Project itself, and it is only reasonable to expend a portion of the indirect receipts of the Project for the purpose. The Government of India indeed objected (*vide* Government Order, No. 1396, Revenue, dated 20th September 1881) to the course proposed, but I take it that their objection was confined to the sale-proceeds of tank-bed porambokes only and did not extend to sale-proceeds of waste lands. In speaking of the sale-proceeds of waste lands, reference was made to the communal rights of villagers to the occupancy right in them, and the sale was recommended on independent grounds. Even if any rights are infringed by the proposed course (as I believe they are to some extent), due reparation will be made by spending the proceeds or a part in improving the village communications, which will enable the ryot to carry his produce with greater facility to the market. For the new tracks and road deviations the requisite lands have to be taken up at once as they will become valuable after the completion of the project. It is very doubtful whether the District Board, which will appreciably benefit by the project, only several years after its completion, can possibly find funds for so large an expenditure. The propriety of the appropriation has also been admitted by Government (Government Order No. 1716, Revenue, dated 25th February 1875). In the above circumstances, I would strongly urge upon the consideration of Board and Government the desirability of utilising a portion of the sale-proceeds of waste lands in the improvement of village communications.

46. With reference to the concluding portion of Sir Charles Elliott's note, I beg to add that since 1887 no lands in the tracts commanded by the Project have been assigned on patta. There are, however, certain lands assigned temporarily as will be seen from the enclosed statement No. I; these are also available for sale like the rest of the unoccupied land, nearly the entire extent of which is now available for sale.

47. *Statement No. VI.*—This statement shows the irrigable area and the revenue expected to be realised. The total irrigable area is 91,057 acres under ryotwar, 41,596 under inams and tank-beds, and 66,326 acres second-crop cultivation, aggregating 198,979 acres with a total net revenue of Rs. 7,44,051 (corrected from 7,23,777). The sale-proceeds of waste lands and tank-beds are Rs. 12,25,293.

48. *Statement No. VII.*—The annexed statement shows the percentage of profits arising from the introduction of the scheme. The percentage on expenditure, deducting therefrom half the sale-proceeds of waste lands and one-fourth of those of tank-beds, is Rs. 9·5, while it is Rs. 8·4 if the sale-proceeds are not deducted.

49. As regards the southern bank, I beg to refer the Board to paragraph 15 above and the accompanying statements. The financial results of this branch of the scheme are shown in statement No. XIV.

50. Irrigable area under both the banks with second-crop cultivation is 2,79,884 acres with a net revenue of Rs. 10,27,842 (corrected from 9,97,686). The sale-proceeds of waste lands and tank-beds amount to Rs. 15,28,711.

Read—also the following telegram from the Collector of Madura, to the Secretary to the Commissioners of Land Revenue, dated 10th September 1890:—

Your telegram 5th. Clogstoun's villages Melúr—dry occupied taram assessment 10,622, Periyár 64,702; dry temporarily assigned taram 143, Periyár 838. Additional villages—dry occupied taram 3,539, Periyár 26,346; temporarily assigned taram 19, Periyár 109. Statement 2 columns 6, 11, 14 tally columns 14 or 17 statement 3 in which the heading inams should be read as referring to minor inams only.

Reference on the above, dated 3rd June 1891.

With reference to paragraph 14 of his letter, dated 23rd August 1890, No. 347, it is observed that the Collector adds the existing 25,000 acres on to Project's 175,000 acres to make his total of 200,000 acres. It is not clear if the Collector means that these 25,000 acres shall be irrigated from the project channels, or shall continue to be irrigated from their existing sources; if the former, the Collector is requested to state if he is certain that the whole 25,000 acres is commanded by the project channels, and also if the existing sources thereof will continue to supplement the Periyár water or will be lost to it; if the latter, as would probably be the case in abandoned rain-fed tanks, credit for the full addition of 25,000 acres to the 175,000 cannot be taken. It should also be stated how much of these 25,000 acres are single crop and how much double crop.

(Signed) H. A. SIM,
Acting Secretary.

To the Collector of Madura.

Read—again the following Proceedings of the Board of Revenue (Land Revenue), dated 21st July 1891, No. 2163, Routine:—

Read—the following letter from S. H. WYNNE, Esq., Acting Collector of Madura, to the Secretary to the Commissioners of Land Revenue, dated Korikadavu, 16th July 1891, No. 263:—

In reply to your reference, dated the 3rd ultimo, and Routine No. 1800 of the 18th idem, I have the honour to state that the 25,000 acres referred to are at present irrigated directly from the Vaigai by means of spring channels with which the Periyár irrigation system ought in no way to interfere, and as they are also commanded

by the Periyár channels, they have a double security and should certainly be taken into account and added to the 175,000 acres which are estimated as the total ayacut irrigable by the channels.

2. Of the above 25,000 acres, 5,518 acres are double crop.

Resolution—dated 21st July 1891, No. 2163, Routine.

In the letter read above, the Collector says that all the 25,000 acres stated in paragraph 14 of the original report to have been irrigated by the existing sources on the north bank alone are irrigated directly from the Vaigai by means of spring channels; but from the settlement memoirs it appears that irrigation from the Vaigai on its north bank is confined to the Madura taluk alone, that in the villages under its influence only 10,358 acres of ryotwari and 1,903 acres of inam lands are irrigated by the Vaigai spring channels and tanks fed by them, and that out of the remaining extent of wet lands in that taluk, 1,954 acres derive their supply from minor (hill and other) streams and the remainder from rain-fed tanks. The Collector is requested to report if the present supply available for supplementing the Periyár water on the north bank is that of the 12,261 acres irrigated by the Vaigai or of the 14,215 acres irrigated by the Vaigai and other streams *plus* the supply in two-fifths of the tanks proposed to be retained even after the construction of the Periyár channels; and in the latter case to report the extent for which the present supply in the tanks to be retained both in the Madura and Melúr taluks may be taken credit for.

2. A very early reply is requested, as the Government has been pressing for the Board's report on the subject.

(A true Copy and Extract.)

(Signed) H. A. SIM,
Acting Secretary.

To the Collector of Madura.

Read—also the following letter from S. H. WYNNE, Esq., Acting Collector of Madura, to the Secretary to the Commissioners of Land Revenue, dated 28th July 1891, No. 285:—

In reply to Board's memorandum, No. 2163, Routine, dated 21st July 1891, I have the honour to report that the Deputy Collector, Madura division, in a letter No. 457 of the 9th instant, stated that the precise extent of ryotwari lands irrigated by the existing sources, *i.e.*, by spring and river channels and river-fed tanks on *both the banks* of the Vaigai was 24,337 acres, 9,598 acres on the north bank and 14,739 acres on the south bank (*vide* villagewar list, copy enclosed), and that, of the above extent, acres 5,518 (3,218 on the north and 2,301 on the south bank) are double cropped. The 25,000 acres given in round numbers in my letter read in the Proceedings under reply included the areas under both banks. I regret that the equality of the figures led me to overlook the fact that Mr. Turner in paragraph 14 of his letter was speaking of the north bank only.

2. I think the present supply available for supplementing the Periyár irrigation on the north bank should be set down as that irrigating 9,598 acres, 3,218 acres of which can be irrigated for a second crop, and that Mr. Turner's figures should be modified accordingly. The 12,261 acres which the Board obtained from the settlement memoirs includes unoccupied lands, and as they are not taken up I do not think it can be said that there is water for irrigating them. I think the lands supplied by other streams and by rain-fed tanks should also be excluded in making a safe estimate, especially as Mr. Turner took the extreme limit in estimating the area for which water from the Periyár would be available.

Read—also Government Order, dated 4th September 1891, Mis. No. 4751, Revenue.

Abstract.—Communicating reminder from the Public Works Department regarding report on the Periyár project.

Resolution—dated 30th September 1891, No. 594-A.

The Collector's letters read above will be submitted to Government with reference to Government Order, dated 13th February 1890, No. 1064.

2. With the order quoted above, Government communicated a letter from the Government of India with a note by Sir Charles Elliott in which he calls for the revision of the forecast of the financial prospects of the Periyár project, originally framed by Mr. Clogstoun, in the light of the results of the recent survey and settlement of the Madura district and also asks for information on the following points connected therewith:—

(1) (*a*) whether Government intends to levy water-rate at Rs. 6 per acre as proposed by Mr. Clogstoun or at Rs. 4, and

(*b*) whether the proportion of the second-crop extent irrigable by the project is to be taken at one-half of the first-crop area as originally proposed or at one-third which seems to be the average proportion cultivated with second crop under other irrigation works in the Presidency;

(2) whether lands in the beds of tanks are intended to be thrown open for cultivation; and

(3) whether the tank-bed and the assessed waste lands commanded by the Periyár project are intended to be sold by public auction, and, if so, what amount they are likely to fetch.

3. According to Mr. Clogstoun's estimate, the area likely to be commanded by the project was 100,974 acres for first crop and 53,912 acres for second crop, and the additional revenue due to the project amounted to Rs. 774,274 as shown below:—

Items.	Acres.	Probable increase of revenue.	Rupees.
I. Ryotwar—			
(*a*) Dry, occupied	25,530	....	..
(*b*) Wet, occupied	33,831	....	..
Total, occupied ..	59,361	....	..
Deduct lands irrigated by koramboos which it was thought it would not be advantageous to bring under the project.	7,538	....	..
(*c*) Dry, unoccupied	51,823	....	..
(*d*) Wet, unoccupied	20,616	....	..
Total, Ryotwar ..	6,186	....	..
Deduct all lands not being occupied wet which it was thought it would not be desirable to irrigate owing to the poor quality of the soil.	78,625	....	..
(*e*) Tank-beds (three-fifths of 15,326)	9,813		
II. Minor inam—	68,812	(Rs. 5,25,996 — 1,52,598) or Rs.	3,73,398
Dry	9,196	At Rs. 8 per acre	73,568
Wet	3,400	Water-rate at Rs. 6 per acre ..	20,400
III. Whole inam and zemindari—	4,356	Free	..
Dry	15,210	Water-rate at Rs. 6 per acre ..	91,260
Total first-crop cultivation ..	100,974		5,58,626
Second-crop cultivation ..	53,912	At Rs. 4	2,15,648
		Total ..	7,74,274

The increase of revenue expected from second-crop cultivation was, however, subsequently reduced to Rs. 1,41,374 chargeable on about 45,000 acres and latterly to one lakh, and the water-rate chargeable for the cultivation of inam and zemindari lands was also reduced from Rs. 6 to Rs. 4, thus reducing the total estimate to about $6\frac{1}{4}$ lakhs.

4. In the letters read above, the Collector reports on all the points noted above.

5. The first point dealt with by the Collector is as to how much water can be supplied. Mr. Clogstoun's forecast was framed on the assumption that the irrigating capacity of the Periyár supply was 150,000 acres as estimated by the Engineering officers in 1874; but Colonel Pennycuick, in his later report of 1883, raised this extent to 175,000 acres (100,000 acres for the first crop and 75,000 acres for second crop). To this, the Collector, in his first letter read above, added on about 25,000 acres, thus raising the total capacity to 200,000 acres, on the ground that the Periyár supply could be supplemented to that extent by the existing Vaigai irrigation on its north bank. On a reference from the Board, however, he has since reported that the area at present irrigated by the Vaigai on its north bank is only about 13,000 acres of ryotwar lands or 15,000 * acres inclusive of minor inams, thus giving a total capacity of 190,000 acres (111,500 acres for the first crop and 78,500 acres for the second crop).

* 11,500 acres of ryotwar and minor inam first-crop lands and 3,500 acres of second-crop lands.

6. The survey area of the lands commanded by the Periyár project is acres 187,483 as detailed below :—

		Acres.
I. Ryotwar—		
(*a*) Dry, occupied		36,589
(*b*) Do. unoccupied		20,943
(*c*) Wet, occupied		43,446
(*d*) Do. unoccupied		4,464
(*e*) Tank-beds		22,759
	Total, Ryotwar ...	128,201
II. Minor inam—		
(*a*) Dry		6,456
(*b*) Wet		5,041
	Total ...	11,497
III. Zemindari and entire inam—		
(*a*) Dry		24,180
(*b*) Wet, occupied		15,376
(*c*) Do. unoccupied		2,098
(*d*) Tank-beds		6,131
	Total ...	47,785
	Grand Total ...	187,483

7. The Collector arrives at the irrigable area as shown below :—

(*a*) For dry lands, he allows 25 per cent. on account of lands unirrigable owing to high level or those required for main and branch channels, embankments, roads, &c., and treats the remaining 75 per cent. or 66,130 acres as irrigable.

(*b*) As regards tank-bed lands, the Collector recommends that, with the exception of those covered by five tanks which appear, from the information available in the Public Works Department, to be likely to be retained even after the construction of the works, the rest should be made available for cultivation. He would deduct 40 per cent. of their area on account of bunds and other portions situated on a high level or required for channels, paths, pasture, &c., and treat the remainder as irrigable. The same deduction is made in the case of tank-bed lands in whole inam and zemindari villages. The irrigable area under this head is thus 17,250 acres.

(*c*) As regards second-crop cultivation, the Collector is of opinion that, considering all the circumstances, the irrigable area may uniformly be taken at one-half of the first-crop area under all the descriptions of lands.

8. The Collector's figures of areas thus worked out against each item are as shown below :—

Description of land.	Survey area.	Irrigable first-crop area.	Irrigable second-crop area.	Total first and second crop.
	Acs.	Acs.	Acs.	Acs.
I. Ryotwar—				
(*a*) Dry occupied	36,589	27,440	13,720	41,160
(*b*) Dry unoccupied	20,943	15,708	7,854	23,562
(*c*) Wet occupied	43,446	43,446	21,723	65,169
(*d*) Wet unoccupied	4,464	4,464	2,232	6,696
(*e*) Tank-bed	22,759	13,572	6,786	20,358
Total, ryotwar	128,201	104,630	52,315	156,945
II. Minor inams—				
(*a*) Dry	6,456	4,847	2,424	7,271
(*b*) Wet	5,041	5,041	2,520	7,561
Total I & II ryotwar, and minor inams	139,698	114,518	57,259	171,777
III. Whole inam and zemindari—				
(*a*) Dry	24,180	18,135	9,068	27,203
(*b*) Wet occupied	15,376	15,376	7,688	23,064
(*c*) Wet unoccupied	2,098	2,098	1,049	3,147
(*d*) Tank-beds	6,131	3,678	1,839	5,517
Total	47,785	39,287	19,644	58,931
Grand Total	187,483	153,805	76,903	230,708

As the total irrigable extent of Government and minor inam lands in ryotwar villages, including both first and second-crop areas, amounts to 171,777 acres, the Collector takes account of the extent of the dry lands alone in whole inam and zemindari villages to make up the original irrigation capacity of 200,000 acres and leaves the wet and tank-bed lands in those villages out of consideration.

9. As regards the rates of assessment—

I. Under the power reserved to Government in the notification issued prior to the settlement of the Madura district, all ryotwar wet lands are liable to be charged with first group wet assessment on the completion of the Periyár works. Unoccupied dry lands can, of course, be transferred to wet and charged first group wet assessment. The Collector considers that occupied dry lands also could be similarly classified and charged as, owing to the perennial character of the supply, all or nearly all of them will be cultivated with wet crops.

II. In the case of minor inams, he would charge water-rate in the case of dry lands. As regards wet lands, the Collector considers that they should be charged the difference between the settlement and the first group assessment, in consideration of the infinitely better supply of water secured to them at the cost of Government.

III. For dry lands in whole inam and zemindari villages irrigated, the Collector would charge water-rate.

IV. The charge for second crop would follow the charge for the first crop and be either half the water-rate for the first crop or half the first group wet assessment as the case may be.

V. The Collector recommends that the water-rate should be fixed at Rs. 4 an acre, the rate prescribed in the Standing Orders for the whole Presidency.

10. The total irrigable area, both first and second crop, and the total increase of revenue derivable from the several descriptions of lands as estimated by the Collector, are as detailed below.

Description of land.	Total survey area.	Net irrigable area.	Water-rate on minor inam and whole inam and zemindari dry.	Excess of first group over the taram assessment or the entire first group assessment in the case of waste lands.	Total increase in first-crop revenue.	Irrigable second-crop area.	Probable increase in second crop revenue.	Total extent of first and second crop lands.	Total increase in revenue.
I. Ryotwar.	Acs.	Acs.	Rs.	Rs.	Rs.	Acs.	Rs.		Rs.
(*a*) and (*b*) Dry ..	57,532	43,148	..	2,44,814	2,44,814	..	..	..	..
(*c*) and (*d*) Wet ..	47,910	47,910	..	1,13,358	1,13,358	..	..	..	..
(*e*) Tank-beds ..	22,759	13,572	..	96,387	96,387	..	..	..	..
Total, ryotwar ..	128,201	1,04,630	..	4,54,559	4,54,559	52,315	1,49,751	156,945	6,04,310
II. Minor Inam.									
(*a*) Dry	6,456	4,847	19,389	..	19,389	2,424	4,847	7,271	24,236
(*b*) Wet	5,041	5,041	..	8,887	8,887	2,520	5,437	7,561	14,324
Total, minor inam.	11,497	9,888	19,389	8,887	28,276	4,944	10,284	14,832	38,560
Total, ryotwar and minor inam ..	139,698	1,14,518	19,389	4,63,446	4,82,835	57,259	1,60,035	171,777	6,42,870
(*f*) Whole inam and zemindari dry	24,180	18,135	72,539	..	72,539	9,068	18,135	27,203	90,674
Grand Total ..	163,878	1,32,653	91,928	4,63,446	5,55,374	66,327	1,78,170	198,980	7,33,544

11. The Board accepts the Collector's estimate of the irrigable *first-crop* area under ryotwar and minor inams. There is no need to take in the dry lands in whole inam and zemindari villages, as from the revised information recently furnished by the Collector as to the irrigational capacity of the Periyár supplemented by the existing sources, it appears that the supply available for first-crop cultivation (acres 111,500) will not exceed the extent available for irrigation in ryotwar villages (acres 114,518). As regards *second-crop* cultivation, there will be supply of water for 78,500 acres. The Board accepts the Collector's proposal that one-half of the first-crop area should be assumed as the probable second-crop area in the case of the ryotwar occupied and minor inam lands, both dry and wet. As regards the unoccupied dry, wet and tank-bed lands in ryotwar villages, however, it is open to Government to register the whole extent as double crop. Such a course has been adopted in Salem and Vizagapatam as one calculated to prevent the evasion of second-crop charge. The Board would, however, allow a deduction of $\frac{1}{8}$th on account of lands situated at the tail-end of the works and treat $\frac{7}{8}$th of the lands as second-crop area. The proportions adopted above are no doubt high, but the eagerness of the Madura ryots for, and their appreciation of the value of, wet cultivation is so great that it would be reasonable to expect that the full supply provided for second-crop cultivation would be utilized. The total extent available for second-crop cultivation as thus calculated, is only about 70,000 acres; the remaining supply available for the irrigation of 8,000 and odd acres may, the Board thinks, be supplied during the second-crop season to whole inam and zemindari wet lands which are 15,376 acres in extent.

12. The irrigable first and second-crop areas will then stand as under :—

—	Irrigable first-crop area.	Irrigable second-crop area.	Total irrigable area.
I. Ryotwar—			
(*a*) Dry occupied	Acs. 27,440	Acs. 13,720	Acs 41,160
(*b*) Dry unoccupied	15,708	13,744	29,452
(*c*) Wet occupied	43,446	21,723	65,169
(*d*) Wet unoccupied	4,464	3,906	8,370
(*e*) Tank-beds	13,572	11,876	25,448
II. Minor inam—			
(*a*) Dry	4,847	2,424	7,271
(*b*) Wet	5,041	2,520	7,561
III. Whole inam and zemindari—Dry	..	8,000	8,000
Total ..	114,518	77,913	1,92,431

13. Turning to the rate of assessment the Board accepts the Collector's proposals in the case of all the descriptions of land excepting I-(*a*) ryotwar occupied dry lands and II-(*b*) minor inam wet lands. Ryotwari occupied dry lands are only chargeable with water-rate, as the proviso in the Madura Settlement notification reserving to Government the power to re-classify the lands does not apply to them. In the case of the similarly situated Sangam and Rushikulya Projects, Government have held that the classification cannot be disturbed during the term of the current settlement (*vide* G.O., dated 5th November 1887, No. 1041). In the case of wet minor inams also, the Board considers that the Collector's suggestion to levy the difference between the settlement and first group wet assessments is inadmissible with reference to G.Os., dated 16th January 1874 and 7th April 1875, Nos. 101 and 550. As regards single-crop wet inams growing second crop with the aid of Government water, they are liable to the charge of half the first group wet assessment.

14. As regards the water-rate, the Land Revenue Commissioners consider that the rate of Rs. 4 sanctioned and levied throughout the whole Presidency should not be departed from. The best lands could probably pay more than Rs. 4, but this rate is high for bad lands. A compromise is, therefore, necessary and the conditions of the case are met by a rate of Rs. 4. The Settlement Commissioner, however, thinks that the rate should be Rs. 5 per acre for first crop and Rs. 3 per acre for second-crop, a rate which would assimilate the assessment on these lands to that paid by all other lands under the project. He points out that the average dry assessment and the water-rate at Rs. 4 on occupied ryotwar lands amount to only about Rs. 5 per acre against Rs. $6\frac{1}{2}$, the average consolidated wet assessment per acre leviable on unoccupied lands of the same description, that this disparity between the two rates is due to the lowness of the proposed water-rate and that there is no reason why the occupied dry lands which could better afford to pay a higher assessment should be more leniently assessed than the unoccupied dry lands. He considers it highly inadvisable to place an unreasonably low water-rate on these lands in order that a certain small percentage of inferior lands may be cultivated at a profit, and would prefer to exclude these lands from the area to be irrigated under the project, leaving them to be cultivated as dry. He observes further that proposals for a water-rate of Rs. $5\frac{1}{4}$ on the lands to be irrigated by the Calingaroyen channel extension in Coimbatore have been already accepted by the Government of India.

15. Applying the above rates to the figures of area given in the statement appended to paragraph 12, the financial results would be as shown below :—

—	First-crop area.	Water-rate at Rs. 4.	Excess of first group assessment over the present assessment or entire first group assessment.	Total increase in first-crop revenue.	Probable second-crop area.	Estimated increase in second-crop revenue.	Total irrigable area both first and second crop.	Total increase of revenue.
	Acs.	Rs.	Rs.	Rs.	Acs.	Rs.	Acs.	Rs.
I. Ryotwar—	27,440	109,761	..	1,09,761	13,720	27,440	41,160	1,37,201
(*a*) Dry occupied ..	15,708	..	99,222	99,222	13,744	43,516	29,452	1,42,738
(*b*) Dry unoccupied ..	43,446	..	93,919	93,919	21,723	52,428	65,169	1,46,347
(*c*) Wet occupied ..	4,464	..	19,439	19,439	3,906	8,670	8,370	28,109
(*d*) Wet unoccupied ..	13,572	..	96,387	96,387	11,876	42,169	25,448	1,38,556
(*e*) Tank-beds				19,389	2,424	4,847	7,271	24,236
II. Minor inams—	4,847	19,389	..	..	2,520	5,437	7,561	5,437
(*a*) Dry	5,041	..	..	..	8,000	16,000	8,000	16,000
(*b*) Wet	..	..	..	..				
III. Whole inam and zemindari—Dry				4,38,117	77,913	200,507	1,92,431	6,38,624
Total ..	114,518	1,29,150	3,08,967					

The total increased revenue due to the project is Rs. 6,38,624, which on an estimated outlay of $66\frac{1}{2}$ lakhs of rupees is a return of 9·6 per cent.

16. If the water-rate were fixed at Rs. 5 per acre for the first crop and Rs. 3 for the second crop, the increase of revenue would be Rs. 4,70,404 under first crop, and Rs. 2,24,651 under second crop, making a total of Rs. 6,95,055 or 10·45 per cent. on the estimated outlay.

17. On the expiration of the current settlement, it will be open to Government to transfer all the occupied dry ryotwar lands to wet and to register as double crop the whole of the occupied dry and wet lands. But as the supply of water available for second-crop cultivation is fully utilized by the probable irrigable area as now fixed, the probable increase of revenue derivable at the next settlement is only that accruing from the adoption of the first group wet assessment instead of water-rate in the case of the occupied dry lands. This will amount to Rs. 51,799 as shown in the margin, and will raise the estimated increase of revenue to Rs. 6,90,423.

	Rs.
Increase in the first-crop revenue expected from the levy of first group wet assessment on occupied dry lands	1,45,592
Second-crop revenue taken at half the assessment on half the extent of the first-crop dry lands ...	43,408
Total ...	1,89,000
Deduct—	
Increase expected from the levy of water-rate	1,37,201
Net increase ...	51,799

18. The second and third questions asked by the Government of India regarding the abandonment of tanks and the expediency of selling the tank-bed and the assessed waste lands are answered by the Collector in the affirmative. He holds that tank beds are clearly the property of Government and should be sold. His view in regard to the expediency of selling the assessed waste lands is that all assessed waste being presumably the property of Government may be sold at its option when and how it chooses, that in the present case the lands being mostly of an inferior quality and having derived their present value solely from the execution of the Periyár works, Government is equitably entitled to recoup its expenditure out of the sale-proceeds thereof, that the resident population is scanty and poor and has not the means to bring more lands under cultivation, and that if the lands are granted free on darkhast, they will only be sold to outsiders. The Board agrees with the Collector in considering that the tank-bed lands should be thrown open to cultivation and that the occupancy right in them and in the assessed waste lands should be sold on behalf of Government. With reference, however, to the order of Government, dated 3rd July 1890, No. 513, the Board would set apart 10 per cent. of the assessed waste or 2,000 acres for assignment on dharkhast to resident ryots, no such ryot being, however, allowed to take up more than he has the means and capacity to cultivate.

19. On a careful consideration of the circumstances of each locality, the Collector estimates the price of these lands at rates ranging from Rs. 40 to Rs. 75 in the case of tank-beds and wet waste and from Rs. 15 to Rs. 40 in the case of dry-waste. Their extent and the amount likely to be realized by their sale are given by the Collector as follows :—

	Acs.	Rs.
Tank beds	13,572	6,41,133
Dry waste	15,708	3,78,503
Wet waste	4,464	2,05,657
Total ...	33,744	12,25,293

Deducting 10 per cent. of the assessed waste or 2,000 acres, and their estimated value, the extent available for sale amounts to acres 31,744 and their probable sale-proceeds to Rs. 11,66,877.

20. This amount might be taken as a set-off against the capital cost, but the Collector strongly recommends that it, or at all events a portion of it, should be utilized in providing drainage and distributary channels and in the improvement of the village communications. He adds that if this suggestion be adopted, Government will be securing to itself quicker returns in the shape of increased revenue from extended cultivation and will enable the ryots to reap the full benefit of the Periyár irrigation. The Board supports the Collector's recommendation and would urge that the minor distributaries and improved means of communication should be provided out of the sale-proceeds. Without this, it may be an indefinite time before either Government or

the ryots obtain the full advantage of the supply of water to be made available by the project, and it will certainly be a long time before the Local Funds can hope to cope effectively with the want of communications and drainage, which will be at once felt.

21. The above forecast relates exclusively to the increase of revenue derivable in the villages commanded by the Periyár works on the *north* bank of the Vaigai. There is a small portion commanded by them on the south bank also, for which the Collector has submitted a similar forecast; but the Board has not dealt with it as the Periyár supply can be fully utilized on the north bank itself.

22. The Collector's statements revised with reference to the Board's views are appended to these Proceedings.

(True Copies and Extract.)

(Signed) H. A. SIM,
Acting Secretary.

To the Secretary to Government, Revenue Department.
Copy to the Collector of Madura.

APPENDIX.

North Bank.

No. I.—Statement showing the information called for by the Board in its Proceedings, No. 63, dated 1st February 1890, regarding the villages affected by the Periyár, Madura district.

Name of the Taluk.	The total extent of land that will be available for disposal and its description inclusive of lands temporarily assigned, columns 10 to 12.					The extent of wet lands held either on inam or permanent tenure which have been regularly cultivated as such and which will be affected by the project channels including whole inam villages, &c.			The extent of land that has been given away on annual temporary lease (included in columns 2 to 6).		
	Waste.			Three-fifths of tank poramboke.	Grand Total.	Held on inam tenure.	Held on permanent tenure.	Total.			
	Dry.	Wet.	Total.						Dry.	Wet.	Total.
1	2	3	4	5	6	7	8	9	10	11	12
Madura—	ACRS.	ACRS.	ACRS.	ACRS.	ACRS.	ACRS.	ACRS.	ACRS.	ACRS.	ACRS.	ACRS.
Villages dealt with by Mr. Clogstoun	7,126	2,565	9,691	6,261	15,952	14,658	1,957	16,615	101	87	188
Additional villages ..	337	30	367	261	628	657	1,260	1,917	..	..	..
Total ..	7,463	2,595	10,058	6,522	16,580	15,315	3,217	18,532	101	87	188
Melúr—											
Included in Mr. Clogstoun's report	5,504	1,371	6,875	5,318	12,193	2,155	..	2,155	152	38	190
Additional villages ..	2,740	498	3,238	1,732	4,970	1,828	..	1,828	20	5	25
Total ..	8,244	1,869	10,113	7,050	17,163	3,983	..	3,983	172	43	215
Grand Total ..	15,707	4,464	20,171	13,572	33,743	19,298	3,217	22,515	273	130	403

Note.—The figures in columns 7 to 9 include also wet waste in zemindari and whole inam villages. Exclusive of the area of wet waste, the figures to be entered in column 9 are as follow :—

	Clogstoun's villages.	Additional villages.
Madura	14,761	1,837
Melúr	2,076	1,744
Total ..	16,837	3,581

No. II.—Statement showing the area commanded by the Periyár channel and the increase of revenue to be derived therefrom by the project in the villages on the north bank of the Vaigai river.

—	DRY.								
	Ayacut or total area—assessed lands.		Occupied.		Irrigable area after deducting 25 per cent. from the occupied			Total unoccupied area.	
	Extent.	Assessment.	Extent.	Assessment.	Extent.	Water-rate at Rs. 4 per acre.	Excess of 1st group or anicut irrigation assessment as per classification of the soil as per settlement over the taram assessment.	Extent.	Assessment.
1	2	3	4	5	6	7	8	9	10
VILLAGES DEALT WITH IN MR. CLOGSTOUN'S REPORT.	ACS. CTS.	RS. A.	ACS. CTS.	RS. A.	ACS. CTS.	RS. A.	RS. A.	ACS. CTS.	RS. A.
North bank.									
Madura taluk (89 villages)—									
Ryotwar	25,299 19	23,670 5	15,846 94	16,344 1	11,885 0	47,540 0	58,941 12	9,452 25	7,326 4
Minor inams	3,213 4	3,167 4	3,213 4	3,167 4	2,414 98	9,659 15	13,055 6	..	..
Zemindari and whole inam villages, dry lands (122)	18,258 28	22,608 11	12,037 45	13,988 15	9,028 9	36,112 6	36,112 6	6,220 83	8,619 12
Total ..	46,770 51	49,446 4	31,097 43	33,500 4	23,328 7	93,312 5	1,08,109 8	15,673 8	15,946 0
Melúr taluk—									
Ryotwar (20 villages)	21,090 84	21,075 15	13,751 31	14,162 15	10,314 2	41,256 1	54,080 0	7,339 53	6,913 0
Minor inams	1,921 36	2,082 6	1,921 36	2,082 6	1,441 8	5,764 5	8,290 0	..	..
Whole inam villages, dry lands (5 villages).	2,362 68	..	1,088 71	..	816 53	3,266 2	3,266 2	1,273 97	..
Total ..	25,374 88	23,158 5	16,761 38	16,245 5	12,571 63	50,286 8	65,636 2	8,613 50	6,913 0
Total of Madura and Melúr taluks—									
Ryotwar	46,390 3	44,746 4	29,598 25	30,507 0	22,199 2	88,796 1	1,13,021 12	16,791 78	14,239 4
Minor inams	5,134 40	5,249 10	5,134 40	5,249 10	3,856 6	15,424 4	21,345 6	..	..
Zemindari and whole inam villages, dry lands	20,620 96	22,608 11	13,126 16	13,988 15	9,844 62	39,378 8	39,378 8	7,494 80	8,619 12
Grand Total ..	72,145 39	72,604 9	47,858 81	49,745 9	35,899 70	1,43,598 13	1,73,745 10	24,286 58	22,859 0

No. II.—Statement showing the area commanded by the Periyár channel and the increase of revenue, &c.—*cont.*

—	DRY—*cont.*								WET.	
	Government waste.						Expected increase under total dry.		Ayacut or total area.	
	Irrigable area after deducting 25 per cent.									
	Assigned temporarily.			Unoccupied waste.						
	Extent.	Water-rate at Rs. 4 per acre.	Excess of the 1st group or anicut irrigation assessment according to the classification of the soil as per settlement over the taram assessment.	Extent.	Water-rate at Rs. 4 per acre.	First group or anicut irrigation assessment according to the classification of the soil as per settlement.	Total of columns 7, 13 and 16	Increase in assessment on the classification of the soil—columns 8, 13 and 16.	Extent.	Assessment.
11	12	13	14	15	16	17	18	19	20	
VILLAGES DEALT WITH IN MR. CLOGSTOUN'S REPORT.	ACS. CTS.	RS. A.	RS. A.	ACS. CTS.	RS. A.	RS. A.	RS. A.	RS. A.	ACS. CTS.	RS. A.
North bank.										
Madura taluk (89 villages)—										
Ryotwar	100 77	403 1	506 15	7,025 0	28,100 0	45,156 4	93,203 3	1,04,604 15	25,913 28	1,06,197 7
Minor inams	..	..	..	..	..	..	9,659 15	13,055 6	..	..
Zemindari and whole inam villages, dry lands (122)	..	..	..	4,665 62	18,662 7	18,662 7	54,774 13	54,774 13	3,286 91	14,824 5
Total ..	100 77	403 1	506 15	11,690 62	46,762 7	63,818 11	1,57,637 15	1,72,435 2	29,200 19	1,21,021 12
Melúr taluk—										
Ryotwar (20 villages)	152 21	608 14	695 1	5,351 92	21,407 11	37,334 12	79,285 14	92,109 13	15,265 81	50,068 0
Minor inams	..	..	..	..	..	..	5,764 5	8,290 0	1,021 41	3,577 5
Whole inam villages, dry lands (5 villages).	..	..	..	955 48	3,821 15	3,821 15	7,088 1	7,088 1	..	..
Total ..	152 21	608 14	695 1	6,307 40	25,229 10	41,156 11	92,138 4	1,07,487 14	16,287 22	53,645 5
Total of Madura and Melúr taluks—										
Ryotwar	252 98	1,011 15	1,202 0	12,376 92	49,507 11	82,491 0	1,72,489 1	1,96,714 12	41,179 9	1,56,265 7
Minor inams	..	..	..	..	..	..	15,424 4	21,345 6	4,308 32	18,401 10
Zemindari and whole inam villages, dry lands	..	..	..	5,621 10	22,484 6	22,484 6	61,862 14	61,862 14	..	..
Grand Total ..	252 98	1,011 15	1,202 0	17,998 2	71,992 1	1,04,975 6	2,49,776 3	2,79,923 0	45,487 41	1,74,667 1

No. II.—Statement showing the area commanded by the Periyár channel and the increase of revenue, &c.—*cont.*

—	WET—*cont.*											
	Occupied.			Unoccupied total area.		Government waste.						
						Assigned temporarily.			Unoccupied waste.			
	Extent.	Assessment.	Difference between the first group and taram assessment due to Periyár.	Extent.	Assessment.	Extent.	Assessment.	Difference between the first group and taram assessment.	Extent.	Assessment.	First group assessment.	Total of columns 23, 28 and 31.
	21	22	23	24	25	26	27	28	29	30	31	32
VILLAGES DEALT WITH IN MR. CLOGSTOUN'S REPORT.	ACS. CTS.	RS. A.	RS. A.	ACS. CTS.	RS. A.	ACS. CTS.	RS. A.	RS. A.	ACS. CTS.	RS. A.	RS. A.	RS. A.
North bank.												
Madura taluk (89 villages)—												
Ryotwar	23,348 39	99,146 10	38,304 4	2,564 89	7,050 13	87 43	259 13	162 10	2,477 46	6,791 0	11,255 9	49,722 7
Minor inams	3,286 91	14,824 5	4,517 14	..	..	..	..	..	..	..	..	4,517 14
Zemindari and whole inam villages, dry lands (122)	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	26,635 30	1,13,970 15	42,822 2	2,564 89	7,050 13	87 43	259 13	162 10	2,477 46	6,791 0	11,255 9	54,240 5
Melúr taluk—												
Ryotwar (20 villages)	13,894 89	45,892 1	40,759 8	1,370 92	4,175 15	38 3	105 4	90 13	1,332 89	4,070 11	5,144 14	45,995 3
Minor inams	1,021 41	3,577 5	2,674 10	..	..	..	..	..	..	..	..	2,674 10
Whole inam villages, dry lands (5 villages).	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	14,916 30	49,469 6	43,434 2	1,370 92	4,175 15	38 3	105 4	90 13	1,332 89	4,070 11	5,144 14	48,669 13
Total of Madura and Melúr taluks—												
Ryotwar	37,243 28	1,45,038 11	79,063 12	3,935 81	11,226 12	125 46	365 1	253 7	3,810 35	10,861 11	16,400 7	95,717 10
Minor inams	4,308 32	18,401 10	7,192 8	..	..	..	..	..	..	..	..	7,192 8
Zemindari and whole inam villages, dry lands	..	..	..	..	..	..	..	..	..	..	..	..
Grand Total ..	41,551 60	1,63,440 5	86,256 4	3,935 81	11,226 12	125 46	365 1	253 7	3,810 35	10,861 11	16,400 7	1,02,910 2

No. II.—Statement showing the area commanded by the Periyár channel and the increase of revenue, &c.—*cont.*

—	TANK-BED PORAMBOKE.			Total first-crop assessment of dry, wet and tank-bed.			PROBABLE SECOND-CROP REVENUE		
		Irrigable area after deducting 40 per cent., on account of tank area that cannot be irrigated owing to high level lands required for channel pasture, &c.						First-crop assessment.	
	Extent.	Extent.	Assessment at the highest 1st group rate in each village.	Total extent, columns 6, 11, 14, 19 and 34.	Increase expected from the levy of water-rate on occupied dry lands and from the introduction of anicut rates on other dry or wet lands.	Increase expected from the levy of first group or anicut irrigation assessment on all lands; total of columns 18, 32 and 35.	Extent.	Water-rate on occupied dry and first group assessment on the other classes of lands.	First group assessment on all lands occupied and unoccupied.
	33	34	35	36	37	38	39	40	41
VILLAGES DEALT WITH IN MR. CLOGSTOUN'S REPORT.	ACS. CTS.	ACS. CTS.	RS. A.	ACS. CTS.	RS. A.	RS. A.	ACS. CTS.	RS. A.	RS. A.
North bank.									
Madura taluk (89 villages)—									
Ryotwar	10,573 98	6,261 11	43,220 11	51,185 16	1,86,146 5	1,97,548 1	(o) 17,616 70 (u) **13,957 80**	92,495 7 **88,075 1**	1,04,230 8 **88,075 1**
Minor inams	..	..	..	5,701 89	14,177 13	17,573 4	2,850 94	14,501 0	17,387 11
Zemindari and whole inam villages, dry lands (122).	..	..	..	13,693 71	54,774 13	54,774 13	..	..	..
Total ..	10,573 98	6,261 11	43,220 11	70,580 76	2,55,098 15	2,69,896 2	34,425 44	1,95,071 8	2,09,693 4
Melúr taluk—									
Ryotwar (20 villages)	8,863 57	5,317 66	38,849 13	36,401 62	1,64,130 14	1,76,954 13	(o) 12,104 45 (u) **10,668 62**	63,953 12 **72,057 0**	75,676 14 **72,057 0**
Minor inams	..	..	..	2,462 49	8,438 15	10,964 10	1,231 25	6,008 3	8,052 4
Whole inam villages, dry lands (5 villages).	..	..	..	1,772 1	7,088 1	7,088 1	..	..	..
Total ..	8,863 57	5,317 66	38,849 13	40,636 12	1,79,657 14	1,95,007 8	24,004 32	1,42,018 15	1,55,786 2
Total of Madura and Melúr taluks—									
Ryotwar	19,437 55	11,578 77	82,070 8	87,586 78	3,50,277 3	3,74,502 14	(o) 29,721 15 (u) **24,626 42**	1,56,449 3 **1,60,132 1**	1,79,907 6 **1,60,132 1**
Minor inams	..	..	..	8,164 38	22,616 12	28,537 14	4,082 19	20,509 3	25,439 15
Zemindari and whole inam villages, dry lands	..	..	..	15,465 72	61,862 14	61,862 14	..	..	..
Grand Total ..	19,437 55	11,578 77	82,070 8	111,216 88	4,34,756 13	4,64,903 10	58,429 76	3,37,090 7	3,65,479 6

(o) Represents occupied lands. (u) Represents unoccupied and tank-bed lands.

No. II.—Statement showing the area commanded by the Periyár channel and the increase of revenue, &c.—*cont.*

	PROBABLE SECOND-CROP REVENUE—*cont.*			PROBABLE INCREASE IN SECOND-CROP ASSESSMENT DUE TO THE PROJECT.		TOTAL FIRST AND SECOND-CROP REVENUE DUE TO THE PROJECT.		TOTAL REVENUE DUE TO THE PROJECT DEDUCTING TANK-BEDS.	
	Second-crop assessment.								
	Water-rate at Rs. 2 per acre for occupied dry and half the first group assessment for the other classes of lands.	At half the first group wet assessment.	Present second-crop assessment.	Water-rate at Rs. 2 per acre for occupied dry lands and half the first group wet assessment in the case of other lands.	If half the first group wet assessment be charged in all cases.	Calculated on the basis of water-rate at Rs. 4 for occupied dry and of the first group assessment for the other lands.	Calculated on the basis of the first group assessment in all cases.	Increase in revenue at Rs. 4 per acre for occupied dry and at the first group assessment for other lands.	Increase in revenue expected from the adoption of the highest group assessment in all cases.
	42	43	44	45	46	47	48	49	50
VILLAGES DEALT WITH IN MR. CLOGSTOUN'S REPORT.	RS. A.	RS. A.	RS. A.	RS. A.	RS. A.	RS. A.	RS. A.	RS. A.	RS. A.
North bank.									
Madura taluk (89 villages)—									
Ryotwar	46,247 11	52,115 4	10,161 4	36,086 7	41,954 0	2,22,232 12	2,39,502 1	2,04,140 9	2,21,409 14
	44,037 9	44,037 9	..	44,037 9	44,037 9	44,037 9	44,037 9		
Minor inams	7,250 8	8,693 13	2,035 0	5,215 8	6,658 13	19,393 5	24,232 1	19,393 5	24,232 1
Zemindari and whole inam villages, dry lands (122)	..	..	..	..	..	54,774 13	54,774 13	54,774 13	54,774 13
Total ..	97,535 12	1,04,846 10	12,196 4	85,339 8	92,650 6	3,40,438 7	3,62,546 8	2,78,308 11	3,00,416 12
Melúr taluk—									
Ryotwar (20 villages)	31,976 14	37,838 7	1,628 7	30,348 7	36,210 0	1,94,479 5	2,13,164 13		
	36,028 8	36,028 8	..	36,028 8	36,028 8	36,028 8	36,028 8	1,74,661 3	1,93,346 11
Minor inams	3,004 2	4,026 2	..	3,004 2	4,026 2	11,443 1	14,990 12	11,443 1	14,990 12
Whole inam villages, dry lands (5 villages.)	..	..	..	..	..	7,088 1	7,088 1	7,088 1	7,088 1
Total ..	71,009 8	77,893 1	1,628 7	69,381 1	76,264 10	2,49,038 15	2,71,272 2	1,93,192 5	2,15,425 8
Total of Madura and Melúr taluks—									
Ryotwar	78,224 9	89,953 11	11,789 11	66,434 14	78,164 0	4,16,712 1	4,52,666 14		
	80,066 1	80,066 1	..	80,066 1	80,066 1	80,066 1	80,066 1	3,78,801 12	4,14,756 9
Minor inams	10,254 10	12,719 15	2,035 0	8,219 10	10,684 15	30,836 6	39,222 13	30,836 6	39,222 13
Zemindari and whole inam villages, dry lands	..	..	..	..	..	61,862 14	61,862 14	61,862 14	61,862 14
Grand Total ..	1,68,545 4	1,82,739 11	13,824 11	1,54,720 9	1,68,915 0	5,89,477 6	6,33,818 10	4,71,501 0	5,15,842 4

No. II.—Statement showing the area commanded by the Periyár channel and the increase of revenue, &c.—*cont.*

	DRY.								
	Ayacut or total area—assessed lands.		Occupied.		Irrigable area after deducting 25 per cent. from the occupied.			Total unoccupied area.	
	Extent.	Assessment.	Extent.	Assessment.	Extent.	Water-rate at Rs. 4 per acre.	Excess of 1st-group or anicut irrigation assessment as per classification of the soil as per settlement over the taram assessment.	Extent.	Assessment.
1	2	3	4	5	6	7	8	9	10
ADDITIONAL VILLAGES.	ACS. CTS.	RS. A.	ACS. CTS.	RS. A.	ACS. CTS.	RS. A.	RS. A.	ACS. CTS.	RS. A.
North bank—cont.									
Madura taluk—									
Ryotwar (12 villages)	2,865 92	2,769 15	2,366 14	2,406 1	1,774 61	7,098 7	9,763 10	499 78	363 14
Minor inams	374 46	355 13	374 46	355 13	280 84	1,123 6	1,510 6	..	..
Zemindari and whole inam villages, dry lands.	3,028 19	3,914 3	2,304 9	3,316 13	1,728 7	6,912 5	6,912 5	724 10	597 6
Total ..	6,268 57	7,039 15	5,044 69	6,078 11	3,783 52	15,134 2	18,186 5	1,223 88	961 4
Melúr taluk—									
Ryotwar (13 villages)	8,275 97	8,128 9	4,624 70	4,719 7	3,466 51	13,866 1	22,806 14	3,651 27	3,409 2
Minor inams	947 23	967 1	947 23	967 1	710 42	2,841 11	3,951 11	..	..
Whole inam villages, dry lands (6 villages).	530 51	..	324 43	..	243 32	973 4	973 4	206 8	..
Total ..	9,753 71	9,095 10	5,896 36	5,686 8	4,420 25	17,681 0	27,731 13	3,857 35	3,409 2
Total of Madura and Melúr taluks—									
Ryotwar	11,141 89	10,898 8	6,990 84	7,125 8	5,241 12	20,964 8	32,570 8	4,151 5	3,773 0
Minor inams	1,321 69	1,322 14	1,321 69	1,322 14	991 26	3,965 1	5,462 1	..	..
Zemindari and whole inam villages, dry lands	3,558 70	3,914 3	2,628 52	3,316 13	1,971 39	7,885 9	7,885 9	930 18	597 6
Grand Total ..	16,022 28	16,135 9	10,941 5	11,765 3	8,203 77	32,815 2	45,918 2	5,081 23	4,370 6

No. II.—Statement showing the area commanded by the Periyár channel and the increase of revenue, &c.—*cont.*

—	DRY—*cont.*								WET.	
	Government waste.						Expected increase under total dry.		Ayacut or total area.	
	Irrigable area after deducting 25 per cent.									
	Assigned temporarily.			Unoccupied waste.						
	Extent.	Water-rate at Rs. 4 per acre.	Excess of the 1st group or anicut irrigation assessment according to the classification of the soil as per settlement over the taram assessment.	Extent.	Water-rate at Rs. 4 per acre.	First group or anicut irrigation assessment according to the classification of the soil as per settlement.	Total of columns 7, 13 and 16.	Increase in assessment on the classification of the soil—columns 8, 13 and 16.	Extent.	Assessment.
	11	12	13	14	15	16	17	18	19	20
ADDITIONAL VILLAGES.	ACS. CTS.	RS. A.	RS. A.	ACS. CTS.	RS. A.	RS. A.	RS. A.	RS. A.	ACS. CTS.	RS. A.
North bank—cont.										
Madura taluk—										
Ryotwar (12 villages)	..	..	..	337 32	1,349 4	1,998 2	9,096 9	11,761 12	1,321 77	4,388 5
Minor inams	..	..	..	..	..	..	1,123 6	1,510 6	88 62	423 0
Zemindari and whole inam villages, dry lands	..	..	..	543 7	2,172 4	2,172 4	9,084 9	9,084 9	..	..
Total ..	..	..	..	880 39	3,521 8	4,170 6	19,304 8	22,356 11	1,410 39	4,811 5
Melár taluk—										
Ryotwar (13 villages)	19 76	79 0	90 7	2,720 70	10,882 13	13,440 6	27,396 14	36,337 11	5,409 14	17,068 6
Minor inams	..	..	..	..	..	..	2,841 11	3,951 11	644 17	2,174 12
Whole inam villages, dry lands (6 villages).	..	..	..	154 56	618 4	618 4	1,591 8	1,591 8	..	..
Total ..	19 76	79 0	90 7	2,875 26	11,501 1	14,058 10	31,830 1	41,880 14	6,053 31	19,243 2
Total of Madura and Melár taluks—										
Ryotwar	19 76	79 0	90 7	3,058 2	12,232 1	15,438 8	36,493 7	48,099 7	6,730 91	21,456 11
Minor inams	..	..	..	..	..	..	3,965 1	5,462 1	732 79	2,597 12
Zemindari and whole inam villages, dry lands	..	..	..	697 63	2,790 8	2,790 8	10,676 1	10,676 1	..	..
Grand Total ..	19 76	79 0	90 7	3,755 65	15,022 9	18,229 0	51,134 9	64,237 9	7,463 70	24,054 7

No. II.—Statement showing the area commanded by the Periyár channel and the increase of revenue, &c.—*cont.*

—	WET—*cont.*											
	Occupied.			Unoccupied total area.		Government waste.						
						Assigned temporarily.			Unoccupied waste.			
	Extent.	Assessment.	Difference between the first group and taram assessment due to Periyár.	Extent.	Assessment.	Extent.	Assessment.	Difference between the first group and taram assessment.	Extent.	Assessment.	First group assessment.	Total of columns 23, 28 and 31.
	21	22	23	24	25	26	27	28	29	30	31	32
ADDITIONAL VILLAGES.	ACS. CTS.	RS. A.	RS. A.	ACS. CTS.	RS. A.	ACS. CTS.	RS. A.	RS. A.	ACS. CTS.	RS. A.	RS. A.	RS. A.
North bank—cont.												
Madura taluk—												
Ryotwar (12 villages)	1,291 22	4,313 13	2,470 11	30 55	74 8	..	..	..	30 55	74 8	128 0	2,598 11
Minor inams	88 62	423 0	95 6	..	..	..	..	..	..	..	..	95 6
Zemindari and whole inam villages, dry lands	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	1,379 84	4,736 13	2,566 1	30 55	74 8	..	..	..	30 55	74 8	128 0	2,694 1
Melár taluk—												
Ryotwar (13 villages)	4,911 10	15,659 7	12,384 10	498 4	1,408 15	4 84	11 13	9 6	493 20	1,397 2	2,648 0	15,042 0
Minor inams	644 17	2,174 12	1,599 2	..	..	..	..	..	..	..	..	1,599 2
Whole inam villages, dry lands (6 villages).	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	5,555 27	17,834 3	13,983 12	498 4	1,408 15	4 84	11 13	9 6	493 20	1,397 2	2,648 0	16,641 2
Total of Madura and Melár taluks—												
Ryotwar	6,202 32	19,973 4	14,855 5	528 59	1,483 7	4 84	11 13	9 6	523 75	1,471 10	2,776 0	17,640 11
Minor inams	732 79	2,597 12	1,694 8	..	..	..	..	..	..	..	..	1,694 8
Zemindari and whole inam villages, dry lands.	..	..	..	..	..	..	..	..	..	..	..	..
Grand Total ..	6,935 11	22,571 0	16,549 13	528 59	1,483 7	4 84	11 13	9 6	523 75	1,471 10	2,776 0	19,335 3

No. II.—Statement showing the area commanded by the Periyár channel and the increase of revenue, &c.—*cont.*

—	Tank-bed poramboke.			Total first-crop assessment of dry, wet and tank-bed.			Probable second-crop revenue.		
	Extent.	Irrigable area after deducting 40 per cent. on account of tank area that cannot be irrigated owing to high level lands required for channel, pasture, &c.					Extent.	First-crop assessment.	
		Extent.	Assessment at the highest 1st group rate in each village.	Total extent, columns 6, 11, 14, 19 and 34.	Increase expected from the levy of water-rate on occupied dry lands and from the introduction of anicut rates on other dry of wet lands.	Increase expected from the levy of 1st group or anicut irrigation assessment on all lands; total of columns 18, 32 and 35.		Water-rate on occupied dry and 1st group assessment on the other classes of lands.	1st group assessment on all lands occupied and unoccupied.
	33	34	35	36	37	38	39	40	41
Additional Villages.	Acs. cts.	Acs. cts.	Rs. a.	Acs. cts.	Rs. a.	Rs. a.	Acs. cts.	Rs. a.	Rs. a.
North bank—cont.									
Madura taluk—									
Ryotwar (12 villages)	435 35	260 85	1,792 3	3,694 55	13,487 7	16,152 10	(*o*) 1,532 91	6,941 7	9,176 0
							(*u*) 550 13	3,428 8	3,428 8
Minor inams	..	..	..	369 46	1,218 12	1,605 12	184 73	820 14	1,147 10
Zemindari and whole inam villages, dry lands	..	..	..	2,271 14	9,084 9	9,084 9	..	..	..
Total ..	435 35	260 85	1,792 3	6,335 15	23,790 12	26,842 15	2,267 77	11,190 13	13,752 2
Melur taluk—									
Ryotwar (13 villages)	2,885 93	1,731 95	12,524 7	13,348 6	54,963 5	63,904 2	(*o*) 4,188 81	20,955 2	27,195 5
							(*u*) 4,349 15	25,150 8	25,150 8
Minor inams	..	..	..	1,354 59	4,440 13	5,550 13	677 30	3,307 12	4,225 6
Whole inam villages, dry lands (6 villages)	..	..	..	397 88	1,591 8	1,591 8	..	..	..
Total ..	2,885 93	1,731 59	12,524 7	15,100 53	60,995 10	71,046 7	9,215 26	49,413 6	56,571 3
Total of Madura and Melur taluks—									
Ryotwar	3,321 28	1,992 80	14,316 10	17,042 61	68,450 12	80,056 12	(*o*) 5,721 72	27,896 9	36,371 5
							(*u*) 4,899 28	28,579 0	28,579 0
Minor inams	..	..	..	1,724 5	5,659 9	7,156 9	862 3	4,128 10	5,373 0
Zemindari and whole inam villages, dry lands	..	..	..	2,669 2	10,676 1	10,676 1	..	..	..
Total ..	3,321 28	1,992 80	14,316 10	21,435 68	84,786 6	97,889 6	11,483 3	60,604 3	70,323 5

(*o*) Represents occupied lands. (*u*) Represents unoccupied and tank-bed lands.

No. II.—Statement showing the area commanded by the Periyár channel and the increase of revenue, &c.—*cont.*

—	Probable second-crop revenue —*cont.*		Present second-crop assessment.	Probable increase in 2nd-crop assessment due to the project.		Total first and second-crop revenue due to the project.		Total revenue due to the project deducting tank-beds.	
	Second-crop assessment.								
	Water-rate at Rs. 2 per acre for occupied dry and half the 1st group assessment for the other classes of lands.	At half the 1st group wet assessment.		Water-rate at Rs. 2 per acre for occupied dry lands and half the first group wet assessment in the case of other lands.	If half the 1st group wet assessment be charged in all cases.	Calculated on the basis of water-rate at Rs. 4 for occupied dry and of the 1st group assessment for the other lands.	Calculated on the basis of the 1st group assessment in all cases.	Increase in revenue at Rs. 4 per acre for occupied dry and at the 1st group assessment for other lands.	Increase in revenue expected from the adoption of the highest group assessment in all cases.
	42	43	44	45	46	47	48	49	50
Additional Villages.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
North bank—cont.									
Madura taluk—									
Ryotwar (12 villages)	3,470 12	4,588 0	..	3,470 12	4,588 0	16,958 3	20,740 10		
	1,714 4	1,714 4	..	1,714 4	1,714 4	1,714 4	1,714 4	16,096 3	19,878 10
Minor inams	410 7	573 13	..	410 7	573 13	1,629 3	2,179 9	1,629 3	2,179 9
Zemindari and whole inam villages, dry lands.	..	..	..	..	..	9,084 9	9,084 9	9,084 9	9,084 9
Total ..	5,595 7	6,876 1	..	5,595 7	6,876 1	29,386 3	33,719 0	26,809 15	31,142 12
Melur taluk—									
Ryotwar (13 villages)	10,477 9	13,597 10	515 1	9,962 8	13,082 9	64,925 13	76,986 11		
	12,575 4	12,575 4	..	12,575 4	12,575 4	12,575 4	12,575 4	59,497 3	71,558 1
Minor inams	1,653 14	2,112 11	..	1,653 14	2,112 11	6,094 11	7,663 8	6,094 11	7,663 8
Whole inam villages, dry lands (6 villages).	..	..	..	..	..	1,591 8	1,591 8	1,591 8	1,591 8
Total ..	24,706 11	28,285 9	515 1	24,191 10	27,770 8	85,187 4	98,816 15	67,183 6	80,813 1
Total of Madura and Melur taluks—									
Ryotwar	13,948 5	18,185 10	515 1	13,433 4	17,670 9	81,884 0	97,727 5		
	14,289 8	14,289 8	..	14,289 8	14,289 8	14,289 8	14,289 8	75,593 6	91,436 11
Minor inams	2,064 5	2,686 8	..	2,064 5	2,686 8	7,723 14	9,843 1	7,723 14	9,843 1
Zemindari and whole inam villages, dry lands	..	..	..	..	..	10,676 1	10,676 1	10,676 1	10,676 1
Total ..	30,302 2	35,161 10	515 1	29,787 1	34,646 9	1,14,573 7	1,32,535 15	93,993 5	1,11,955 13

No. II.—Statement showing the area commanded by the Periyár channel and the increase of revenue, &c.—*cont.*

—	Dry.								
	Ayacut or total area assessed lands.		Occupied.		Irrigable area after deducting 25 per cent. from the occupied.			Total unoccupied area.	
	Extent.	Assessment.	Extent.	Assessment.	Extent.	Water-rate at Rs. 4 per acre.	Excess of 1st group or anicut irrigation assessment as per classification of the soil as per settlement over the taram assessment.	Extent.	Assessment.
1	2	3	4	5	6	7	8	9	10
ADDITIONAL VILLAGES—*cont.*	ACS. CTS.	RS. A.	ACS. CTS.	RS. A.	ACS. CTS.	RS. A.	RS. A.	ACS. CTS.	RS.
North bank—cont.									
Total of villages dealt with and not dealt with in Mr. Clogstoun's report—									
Ryotwar	57,531 92	55,644 12	36,589 9	37,632 8	27,440 14	1,09,760 9	1,45,592 4	20,942 83	18,012 4
Minor inams	6,456 9	6,572 8	6,456 9	6,572 8	4,847 32	19,389 5	26,807 7	..	..
Zemindari and whole inam villages, dry lands	24,179 66	26,522 14	15,754 68	17,305 12	11,816 1	47,264 1	47,264 1	8,424 98	9,217 2
Total ..	88,167 67	88,740 2	58,799 86	61,510 12	44,103 47	1,76,413 15	2,19,663 12	29,367 81	27,229 6
Whole inam and zemindari villages, wet lands	..	..	..	..	..	..	..	..	..

No. II.—Statement showing the area commanded by the Periyár channel and the increase of revenue, &c.—*cont.*

—	Dry—*cont.*								Wet.	
	Government waste.						Expected increase under total dry.		Ayacut or total area.	
	Irrigable area after deducting 25 per cent.									
	Assigned temporarily.			Unoccupied waste.						
	Extent.	Water-rate at Rs. 4 per acre.	Excess of the 1st group or anicut irrigation assessment according to the classification of the soil as per settlement over the taram assessment.	Extent.	Water-rate at Rs. 4 per acre.	First group or anicut irrigation assessment according to the classification of the soil as per settlement.	Total of columns 7, 13, and 16.	Increase in assessment on the classification of the soil, columns 8, 13 and 16.	Extent.	Assessment.
	11	12	13	14	15	16	17	18	19	20
ADDITIONAL VILLAGES—*cont.*	ACS. CTS.	RS. A.	RS. A.	ACS. CTS.	RS. A.	RS. A.	RS. A.	RS. A.	ACS. CTS.	RS. A.
North bank—cont.										
Total of villages dealt with and not dealt with in Mr. Clogstoun's report—										
Ryotwar	272 74	1,090 15	1,292 7	15,434 94	61,739 12	97,929 8	2,08,982 8	2,44,814 3	47,910 0	1,77,722 2
Minor inams	..	..	..	..	..	..	19,389 5	26,807 7	5,041 11	20,999 6
Zemindari and whole inam villages, dry lands	..	..	..	6,318 73	25,274 14	25,274 14	72,538 15	72,538 15	..	..
Total ..	272 47	1,090 15	1,292 7	21,753 67	87,014 10	1,23,204 6	3,00,910 12	3,44,160 9	52,951 11	1,98,721 8
Whole inam and zemindari villages, wet lands	..	..	..	..	..	..	..	..	..	..