M.R.O. 1—77,006—8-6-37.

(1) Number of pages 1

(2) Date of repair

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Public works DEPARTMENT.

G.O. No. 19. Press Mis.
37-38
Dated 6 - 1 - 1872.

Not to be folded or roughly handled

Read the following papers:—

No. 37. From the Superintending Engineer, 8th Division, to the Chief Engineer for Irrigation, dated Madura, 9th November 1871, No. 2,926.

I HAVE the honour to forward the accompanying statements of irrigation and rainfall for the years 1869-70 and 1870-71, as received from the Collectors of Madura and Tinnevelly, who state that they have been prepared in conformity with the instructions conveyed in your letter to my address, No. 152, dated 11th August last, which was duly communicated to the Collectors.

2. I have to observe that the several columns of the above statements have been filled up correctly, as far as I am able to judge, from the annual accounts rendered by the Village Curnums, and subsequently scrutinized by the responsible talook officials.

3. The form prescribed in G. O., No. 3,026, dated 15th September 1869, for the statement in question, appears to me to have been prepared with great care and forethought, and as the statements now submitted were prepared in conformity with that form, and were forwarded to this office prior to the receipt of your circular memorandum, No. 37, dated 17th ultimo, I do not consider that it is quite fair to the Revenue Department to return the statements again to the Collectors in order to give effect to the instructions contained in your circular, inasmuch as the new and extra task required of the Revenue Department to ascertain accurately what extent of the uncultivated area is culturable, will no doubt be treated by that department as a hardship, and will probably lead to their requesting additional aid to enable them to accomplish the result required, or possibly to their stating their inability to supply such information at all.

4. It is stated in your circular, as a reason for the change advocated by you, that in column 2 of the statements for certain districts the *culturable* area is entered in lieu of the total area, as expressly called for in the form ordered by the Supreme Government. It appears to me, therefore, that if uniformity be desirable, as no doubt it is, that uniformity can be best gained by adhering to the instructions of Government rather than by bodily departing from them.

5. As regards the statement that "the culturable area in each talook is constantly varying," this is an opinion to which perhaps few will subscribe. Except rock and seashore there is perhaps no land whatever that cannot be cultivated under certain conditions. In one district the bed of a river is cultivated. But because the bed of a similar river in another district does not happen to be cultivated, it does not follow that that bed is not culturable. In like manner, in one talook an enterprising planter cuts down jungle and cultivates coffee, tea, pepper, cardamums or what not. And, although similar land in the same talook may not be cultivated, it surely does not follow that that land is not culturable.

On the contrary, it appears to me that the culturable area does not vary, but that the area cultivated, dependent as it is on so many varying circumstances, must always be a varying quantity.

6. Under the above circumstances I request that you will be so good, should you not be satisfied with the explanation herein offered for my retaining the form ordered by Government, as to lay the matter before them with a view of further distinct instructions being issued to this department as to what is to be understood by the term 'culturable land.'

PUBLIC WORKS DEPARTMENT, IRRIGATION OPERATION OF FUSLY 1279.

Comparative Statement of Irrigation and Rainfall for Fuslies 1278 and 1279 in the District of Madura.

Talooks.	Area in Acres.	Cultivated area in Acres.	AREAS IRRIGATED.										RAILWAY.			Remarks.
			FIRST CROP CULTIVATION, FUSLY 1279.			SECOND CROP CULTIVATION, FUSLY 1279.			WHOLE FUSLY 1279.			Per-centage of increase or decrease in Fusly 1279.	Fusly 1278.	Fusly 1279.	Per centage of increase or decrease in Fusly 1279.	
			Total Acres.	In comparison with Fusly 1278.		Total Acres.	In comparison with Fusly 1278.		Total Acres.	In comparison with Fusly 1278.						
				Increase.	Decrease.		Increase	Decrease.		Increase.	Decrease.					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Madura	154,423	103,258	34,456	5,048	...	9,945	...	4,896	44,401	152	...	...	34 15	27 425	...	Comparison with irrigation of Fusly 1276, the most recent famine year. Fusly 1276. Acres. 1st crop 135,134 2nd ,, Fusly 1279. Acres 144,434
Tirumungalum ...	227,852	180,189	16,406	1,996	...	2,588	...	1,547	18,094	449	...	...	28 78	30 575	...	
Melur	176,107	103,634	27,238	3,410	...	4,711	...	4,734	31,949	...	1,324	...	29 555	39 615	...	
Periacolum ...	251,500	135,422	14,466	2,502	...	6,147	...	2,192	20,613	310	...	...	11 575	51 80	...	
Dindigul... ...	374,214	214,591	12,868	2,222	...	2,543	...	1,471	15,411	751	...	...	24 345	34 76	...	
Palani	213,286	107,955	9,182	174	...	3,561	1,376	...	12,743	1,550	...	..	12 425	32 60	...	
Sittanendal, etc., villages ...	2,071	350	323	49	...	...	...	...	323	49	...	...	...	...	...	
Total...	1,399,453	845,399	114,939	15,401	...	29,495	1,376	14,840	144,434	3,261	1,324	...	...	...	...	

Net Increase 1,037

RAMNAAD,

10*th October* 1871.

(Signed) R. A. ROBERTS, Lieut.-Colonel, R. E.,
Superintending Engineer, 8th Division.

(Signed) W. McQUHAE,
Acting Collector.

PUBLIC WORKS DEPARTMENT, IRRIGATION OPERATION OF FUSLY 1280.

Comparative Statement of Irrigation and Rainfall for Fuslies 1279 and 1280 in the District of Madura.

Talooks.	Area in Acres.	Cultivated area in Acres.	AREAS IRRIGATED.										RAILWAY.			Remarks.
			FIRST CROP CULTIVATION, FUSLY 1280.			SECOND CROP CULTIVATION, FUSLY 1280.			WHOLE FUSLY 1280.			Per-centage of increase or decrease in Fusly 1280.	Fusly 1279.	Fusly 1280.	Per-centage of increase or decrease in Fusly 1280.	
			Total Acres.	In comparison with Fusly 1279.		Total Acres.	In comparison with Fusly 1279.		Total Acres.	In comparison with Fusly 1279.						
				Increase	Decrease.		Increase.	Decrease.		Increase.	Decrease.					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Madura ...	154,423	101,012	35,054	598	...	7,575	...	2,370	42,629	...	1,772	...	27 425	41 41	...	Comparison with irrigation of Fusly 1276, the most recent famine year. Fusly. 1,276 Acres. 1st crop 135,134 2nd ,, Fusly 1,280 Acres. 140,658
Tirumungalum ...	227,852	179,548	16,367	...	39	1,820	...	768	18,187	...	807	...	30 575	33 365	...	
Melur	176,107	106,334	28,209	971	...	3,285	...	1,426	31,494	...	455	...	39 615	30 9	...	
Periacolum ...	251,500	134,696	9,871	...	4,595	9,764	3,617	...	19,635	...	978	...	51 80	28 75	...	
Dindigul ...	374,214	221,832	13,871	1,003	...	3,017	474	...	16,888	1,477	...	...	34 76	34 71	...	
Palani	213,286	106,587	8,469	...	713	2,997	...	564	11,466	...	1,277	...	32 60	27 725	...	
Sittanendal, etc., villages ...	2,071	350	359	36	...	...	...	...	359	36	...	...	...	20 525	...	
Total...	1,399,453	850,359	112,200	2,608	5,347	28,458	4,091	5,128	140,658	1,513	5,289	...	...	217 385	...	

Net Decrease 3,776

MADURA,

25*th October* 1871.

(Signed) R. A. ROBERTS, Lieut.-Colonel, R.E.,
Superintending Engineer, 8th Division.

(Signed) W. McQUHAE,
Acting Collector.

Comparative Statement of Irrigation and Rainfall for the year 1869-70 and 1870-71 in the District of Tinnevelly.

Talooks.	Area in Acres.	Cultivated area in Acres.	AREAS IRRIGATED.													RAILWAY.		
			KAR				PESHANAM.				WHOLE YEAR 1870-71.							
			1869-70.	1870-71.	Increase	Decrease	1869-70.	1870-71.	Increase	Decrease	1869-70.	1870-71.	Increase	Decrease	Per centage of Increase or Decrease in 1870-71	1869-70.	1870-71.	Per centage of Increase or Decrease in 1870-71.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
																Inches.	Inches.	Inches.
Tenkarei ...	291,636	161,215	12,234	10,891	...	1,343	30,176	31,383	1,207	...	42,410	42,274	...	136	$\frac{1}{3}$	23 21	30 66	7
Tinnevelly ...	233,296	130,048	13,649	13,766	117	...	26,853	26,609	...	244	40,502	40,366	...	136	$\frac{1}{3}$	42 07	30 23	28
Sankaranainarkovil	389,746	181,121	1,043	1,196	153	...	13,092	10,171	...	2,921	14,135	11,367	...	2,768	19$\frac{1}{3}$	34 94	20 65	40
Strivilliputur ...	341,240	167,391	772	1,100	328	...	20,572	19,792	...	780	21,344	20,892	...	452	2$\frac{1}{3}$	22 35	28 00	4
Sattur ...	296,463	135,716	1,099	705	...	394	3,104	3,043	...	61	4,201	3,748	...	453	10$\frac{1}{3}$	39 69	20 83	47
Ottapedaram ...	733,903	152,945	923	474	...	449	3,083	2,893	...	190	4,006	3,367	...	639	15$\frac{1}{3}$	22 38	32 94	9
Nanguneri ...	386,538	232,462	5,545	7,005	1,460	...	28,577	30,740	2,163	...	34,122	37,745	3,623	...	10$\frac{1}{3}$	28 67	28 10	27
Ambasamudram ...	194,156	132,095	19,310	19,144	...	166	31,116	31,738	622	...	50,426	50,882	456	...	1	47 86	37 48	23
Tenkasi ...	215,845	74,123	10,088	9,220	...	798	22,762	21,195	...	1,567	32,850	30,485	...	2,365	7$\frac{1}{3}$	41 54	34 08	18
Total...	*3,082,823	1,319,108	64,663	63,571	2,058	3,150	179,335	177,535	3,992	5,772	243,998	241,126	4,079	6,951	1$\frac{1}{3}$	336 70	262 07	23

*The area, as per quinquennial account, namely, 3,292,800 acres, was run off from the Map. This, namely, 3,082,823 acres, is worked up from the Curnum's details, the difference is 209,977 acres.

(Signed) R. A. ROBERTS, Lieut.-Colonel, R.E.,
Superintending Engineer, 8th Division.

(Signed) R. K. PUCKLE,
Collector.

Proceedings of the Madras Government, Public Works Department, 6th January 1872.

REVISED.

Comparative Statement of Irrigation and Rainfall for the year 1868-69 and 1869-70 in the District of Tinnevelly.

Talooks.	Area in Acres.	Cultivated area in Acres.	AREAS IRRIGATED.													RAILWAY.		
			KAR.				PESHANAM.				WHOLE YEAR 1869-70.							
			1868-69.	1869-70.	Increase.	Decrease.	1868-69.	1869-70.	Increase.	Decrease.	1868-69.	1869-70.	Increase.	Decrease.	Per centage of Increase or Decrease in 1869-70.	1868-69.	1869-70.	Per centage of Increase or Decrease in 1869-70.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
																Inches.	Inches.	Inches.
Tenkarei ...	291,636	162,933	13,974	12,234	...	1,740	28,569	30,176	1,607	...	42,543	42,410	...	133	$\frac{1}{3}$	29·60	33·21	12
Tinnevelly ...	233,296	129,540	14,671	13,649	...	1,022	25,411	26,853	1,442	...	40,082	40,502	420	...	1$\frac{1}{16}$	27·46	42·07	53
Sankaranainarkovil	389,746	130,709	1,657	1,043	...	614	12,340	13,092	752	...	13,997	14,135	138	...	1	25·22	34·94	38
Strivilliputur ...	341,240	167,013	2,097	772	...	1,325	20,324	20,572	248	...	22,421	21,344	...	1,077	4$\frac{7}{8}$	33 38	29·35	12
Sattur ...	296,463	135,411	1,503	1,099	...	404	2,845	3,104	259	...	4,348	4,203	...	145	3$\frac{5}{16}$	31·88	39 68	24
Ottapedaram ...	733,903	152,390	586	923	337	...	3,044	3,083	39	...	3,630	4,006	376	...	1$\frac{3}{16}$	27·33	29·38	8
Nanguneri ...	386,538	232,069	8,405	5,545	...	2,860	30,309	28,577	...	1,732	38,714	34,122	...	4,592	11$\frac{7}{16}$	21 96	38 67	76
Ambasamudram ...	194,156	131,903	19,683	19,310	...	373	30,884	31,116	232	...	50,567	50,426	...	141	$\frac{1}{4}$	39·13	47 86	23
Tenkasi ...	215,845	75,822	10,900	10,088	...	812	22,518	22,762	244	...	33,418	32,850	...	568	1$\frac{11}{16}$	38·75	41·54	7
Total...	*3,082,823	1,317,795	73,476	64,663	337	9,150	176,244	179,335	4,823	1,732	249,720	243,998	934	6,656	2$\frac{5}{16}$	274·71	336·70	23

* The area, as per quinquennial account, namely, 3,292,800 acres, was run off from the Map. This, namely, 3,082,823 acres, is worked up from the Curnum's details, the difference is 209,977 acres.

(Signed) R. A. ROBERTS, Lieut.-Colonel, R.E.,
Superintending Engineer, 8th Division.

(Signed) R. K. PUCKLE,
Collector.

No. 37A.

No. 198.

Note by the Acting Chief Engineer for Irrigation.

With letter No. 2,926, dated 9th November, the Superintending Engineer of the 8th Division submits statements of irrigation and rainfall for the years 1869-70 and 1870-71 in the districts of Madura and Tinnevelly, and takes exception to a requisition from this office that the entries in column 2 of the statement should represent the culturable area in each talook, and not the area of the talook itself.

2. Column 2 of the statement forwarded by the Supreme Government is headed 'area in acres' and column 3 'cultivated area in acres.' In the returns from some of the districts the total area of the talooks is given in column 2, and in those from others the culturable area is given; to ensure uniformity in the preparation of the statements the Superintending Engineers were requested to enter the culturable area in column 2, and preference was given to this entry because the culturable area is constantly varying by the reclamation of swamps or by encroachments on jungle, etc, and a comparison between the culturable area and the area actually cultivated from time to time affords an idea of the material progress and improvement of the talooks or districts, or indicates at a glance where the cultivation is not increasing, and leads to enquiry why one portion of a district is improving more rapidly than another, and what may be done to stimulate the cultivation in, and the improvement of, the more backward or less prosperous portions of a district.

3. Nothing can be learnt from a comparison between the cultivated area and the whole area of one talook with the cultivated area and whole area of another talook, because the circumstances of the various talooks differ very materially; one talook may be very hilly and the proportion of culturable area to the area of the talook be very small, while the cultivated area may bear a large proportion to the culturable area, and hence but little increase of cultivation may be looked for, though on a comparison of the area cultivated with the total area of the talook, the talook may appear to be in a very backward condition when it is not really so, while another talook may have a large culturable area compared with the area of the talook and a comparatively small cultivated area to the culturable area, though the former would bear a larger proportion to the area of the talooks than in the case of the hilly talook adverted to above, and hence any deduction drawn from a comparison of the conditions of the two talooks from the entries given in columns 2 and 3 of the statement would prove to be erroneous.

4. It would perhaps be well to introduce another column into the statement, in which the area of the talook should be given.

5. With reference to paragraph 3 of Colonel Roberts' letter, he does not appear to be aware that the statements submitted by him have not been prepared alike, inasmuch as the entries in column 2 of the Tinnevelly statements contain the areas of the talooks, while column 2 of the Madura statements contains the culturable* area only, the total area of the district as given by the Revenue Board being 5,186,560 acres and the culturable area 1,402,292 acres. As the

* 1,399,453 acres.

No. 3,973, 15th September 1871.

culturable area of all districts is given in the Board's Proceedings quoted above, the Collectors would have no difficulty in affording the information required.

6. Though in the abstract Colonel Roberts may be correct in his statements in paragraph 5, relative to what should be termed the culturable area of a district, and that that area cannot vary, there appears to be no necessity to alter the definition of culturable land as it is understood in this Presidency, and which does not include barren, jungle, and swamp lands.

Fort St. George,
23*rd November* 1871.

(Signed) R. F. OAKES, Captain, R.E.,
Acting Chief Engineer for Irrigation.

No. 38.

Order thereon, 6th January 1872, No. 19.

IRRIGATION, No. 6.

The Government approve of the introduction of an extra column in the comparative statement of irrigation and rainfall to be headed 'areas of the talooks' while 'culturable' will be added to 'area in acres' to what will now be the 3rd column of the statement.

(True Extract.)

Captain, R.E.,
Ag. Joint Secretary to Government.

To Superintending Engineers.
To the Acting Chief Engineer for Irrigation.
" Revenue Department.

Exd. S. T. Augustin.

Govt. of {1872} Madras.

PUBLIC WORKS.

To

SUPERINTENDING ENGINEERS,

&c., &c., &c.

Dated January 6th.

Recd. *Encl.*

G. O., 6th January 1872, No. 19.

JANUARY.

Nos. 37-38

Comparative Statement of Irrigation and Rainfall.—The introduction of an additional column in the comparative statement of irrigation and rainfall, approved.

No 198

From the Ag Chief Engineer for Irrigation

With Letter No 2926 dated 9th November The Superintending Engineer of the 8th Division submits statements of Irrigation and Rainfall for the years 1869-70 & 1870-71 in the Districts of Madura and Tinnevelly and takes exception to a Requisition from this Office that the entries in Column 2 of the statement should represent the cultivable area in each Taluq and not the area of the Taluq itself.

Encls 5 to be returned

2. Column 2 of the Statement forwarded by the Supreme Government is headed Area in acres, and Column 3 Cultivated area in acres. In the returns from some of the Districts the total area of the Taluqs is given in Column 2 and in these from others the cultivable area is given. To ensure uniformity in the preparation of the Statements the Superintending Engineers were requested to enter the cultivable area in Column 2 and preference was given to this entry because the cultivable area is constantly varying by the reclamation of swamps & by encroachments on Jungle and

and a comparison between the cultivable area and the area actually cultivated from time to time affords an idea of the material progress and improvement of the Taluq or District or indicates, at a glance, where the cultivation is not increasing & leads to enquiry why one portion of a District is improving more rapidly than another and what may be done to stimulate the cultivation in and the improvement of the more backward & less prosperous portions of a District.

3. Nothing can be learnt from a comparison between the cultivated area and cultivable area of one Taluq with the cultivated area and cultivable area of another Taluq, because the circumstances of the various Taluqs differ very materially & one Taluq may be very fully and the proportion of cultivable area to the area of the Taluq be very small, while the cultivated area may bear a large proportion to the cultivable area and hence, but little increase of cultivation may be looked for, though on a comparison of the area cultivated with the total area of the Taluq the Taluq may appear to be in a very backward condition, when it is not really so while another Taluq may have a large cultivable area compared with the area of the Taluq and a comparatively small cultivated area & the cultivable area, though the former would bear a large proportion to the area of the Taluq than in the case of the Gudiyatham Taluq adverted to above and hence any deduction drawn from a comparison of the conditions of the two Taluqs from the entries given in Columns 2 & 3 of the Statement would have to be erroneous.

4. It would perhaps be well to introduce another Column into the Statement in which the area of the Taluq should be given.

5. With reference to para 3 of Colonel Roberts letter he does not appear to be aware that the Statements submitted by him have not been prepared alike, in as much the entries in Column 2 of the Triennial Statement contain the areas of the Taluqs while Column 2 of the Madura Statements contains the cultivable area only the total area of the District as given by the Revenue Board being 5,186,660 acres and the cultivable area 1,402,292 acres

x 1399,453 acres

No 3973-15
September 1871

acres: As the cultivable area of all Districts is given in the Boards Proceedings quoted above the Collectors would have no difficulty in affording the information required.

6. Though in the Abstract Colonel Robinson may be correct in his statements in para 5 relative to what should be termed the cultivable area of a District and that that area cannot vary, there appears to be no necessity to alter the definition of cultivable land as it is understood in this Presidency and which does not include Jungle & swamp lands.

Fort St. George
23rd November 1871

I have &c
(Sd) A. Pollock Captain R.E.
Ag. Chief Engineer for Irrigation

To
The Secretary to Govt
PWD

P. W. 1871 Department
From Chief Engr. No. 5667.
The Ag Chief
Engineer for Irrigation
To
The Secretary to
Govt. P.W.D.

No 198

Dated 23rd November-71
Recd 24 Copies-

Note on letter of the Ag Superintending Engineer 8th Division Submitting Statements of Irrigation & Rainfall for the years 1869-70 & 1870-71 in the Districts of Madura and [illegible]

No 837
Rd 8 Decr 1871
29 Nov 71 & 7 Decr 1871

+4 Encls with copy Govt letter No 2424 dated 7 Octr 1871. 15
Submitted 1-8-72

MEMORANDUM.

Requested for reference the under-mentioned papers

The original & 4 Encls with enclosures
letter printed with G.O. No 19
dated 6th January 1872

Office of the Chief Engr. for Irrigation, P. W. Department, 1872

To
The Registrar of the Secretariat

D. M. Hamilton
Head Clerk.

Public Works Dept.

No 19

Proceedings of the Madras government

Read the following

From

The Ag. Chief Engr. for Irrigation

(G.O. No. 198 of 23rd Nov 1911)

The Government approve of the introduction of an extra column in the Comparative Statement of Irrigation and rainfall to be headed 'area of the Taluks' while 'cultivable' will be added to 'area in acres' to what will now be the 5th column of the Statement.

176

Despd 9/1/12

No. 5507.

Govt of Madras.

PUBLIC WORKS.

To The Superintending Engineer

Dated

Read. 1871

G. O., 6th January 1872 No. 19.

Nos. 37938

Comparative Statement of Exhibition & Rain fall. The under Section of an additional column in the Comparative Statement of Exhibition & Rain-fall, is approved.

H