

Public Works (1899) Department.

G.O., No.

778 I ~~1~~

DATED 8 September 1899.

[Despatch Abstract.]

Kurnool-Cuddapah Canal -

Pro. Rev. Smtt recording B.S. Pro. on the
subject of the ~~system~~ increase of regular irrigation
under the — & regarding the insurance rate
in respect of lands to which irrigation from the
canal can be assured in all seasons, recorded

FURTHER PAPERS.

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

Government (1899) of Madras.
REVENUE.

Recd. at Orleans 12-8-1899.
Regd. 25-8-1899.

Enclosures

Spare copies

G.O., No. 491, 26th July 1899.

JULY.

No: 778 Lg 8. Egg
W. Oran there

Recorded with
reference to Co. N. 3052 of 13 April 185.

To The Chief Engineer of the
Supply of water to the
Kurnool-Cuddapah Canal.
2/9/99

Recording Board's Proceedings reporting on the opinion expressed by the Chief Engineer for Irrigation that the regular irrigation under the — would continue to increase steadily by about 1,000 acres a year until this limit was reached; and stating that the question of charging an insurance rate in respect of lands to which irrigation from the canal can be assured in all seasons will, for the present, be dropped.

The maximum limit ~~is~~ reached. ^{is}

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

Read—again the following G.O., Mis. No. 2530, Revenue, dated 16th June 1898:—

Read—the following G.O., No. 305 I., dated 13th April 1898:—

Read—the following paper:—

No. 122 I.

Inspection Notes of Chief Engineer for Irrigation, November-December 1897.

Kurnool-Cuddapah Canal.

3. The future of the canal as a famine protective work is still very uncertain, but the best opinion seems to be that the regular irrigation will continue to increase steadily and the increase is likely to amount to about 1,000 acres a year until the limit is reached. The scantiness of the population and the abundance of land suitable for growing good dry crops in ordinary seasons seem to lie at the root of the difficulty in getting water taken for irrigation. High cultivation, whether by the application of manure, water or more labour, does not pay; and until there is some pressure on the land, it cannot be expected that, in the black soil tracts at least, there will be any strong demand for water, except when the rains fail. The extension of irrigation is taking place chiefly near the larger villages where land is more valuable and the supply of labour better. The want of labour is the greatest difficulty settlers from other districts have had to encounter. Some of these settlers have failed and gone; others are said to be doing well. It has been insufficiently, if at all noticed in reports, that the capacity of the canal to protect dry crops must, in the absence of reservoirs, rapidly decline as the area of wet crops extends. For example, if it be required to water 45,000 acres of dry crop or 1,500 acres a day, this will take as much water as would suffice for probably 10,000 acres of rice during the same period. Conversely, if the rice cultivation extends by 10,000 acres, there may be little or no water available for dry crops. The canal supplied 90,000 acres in 1876-77, but there were apparently only some 15,000 acres of wet crops, 73,000 acres in 1891-92 when the wet area was about 25,000 and 60,000 in 1896-97 when the wet area was about 27,000; but in the last case it was only with difficulty and by refusing water for dry crops in places that the wet crops in Cuddapah district were saved, and when water could be spared rain had fallen and the difficulty was past. There has been some proposal that Government should increase the assessment of lands near the canal and give a guarantee against loss by drought. Any proposal of this nature should be viewed with great caution. Between certain dates there is always an abundance of water and an extraordinary supply can be obtained by running the canal a little deeper than usual. The ryots will not however take water at this time for dry crops. They wait until all hope of rain has failed and the crops are on the point of withering, and as the river-supply is probably running short, at the same time the utility of the canal is strictly limited. The owners of wet lands have the first claim, and this must be recognized. If the cultivators of dry crops would anticipate the rains and water their lands before sowing—giving them an equivalent of 3 or 4 inches of rain—when water is plentiful, a very little rain subsequently would suffice to bring the crops to maturity. It may be that more than average rainfall following such a watering would be injurious to the crops usually grown. I have no experience or information on this point. If the effect of sowing early in the season after an artificial watering is not actually known, I think the experiment

would be worth trying, and the Executive Engineer might take up temporarily a few acres of land in some convenient place and try three or four different kinds of crop. The transfer of dry lands to permanent wet is being encouraged in every possible way and the success of this policy is only a question of time. It follows that, before long, the canal will cease to protect the large area of dry land commanded by it; unless some change can be made in time of cultivation and crops sown without waiting for local rains if they should be late. The restriction of the issue of water for dry crops in 1896 is stated in the Deputy Collector's report printed with G.O., No. 546, Revenue, dated 9th July 1897, to have occurred in the latter part of October. I see no objection in principle to increasing the assessment of the villages bordering the canal and guaranteeing water for dry crops, provided the guarantee is strictly limited to the time when water may be expected to keep above the anicut crest level in a famine year.

(Signed) W. HUGHES,
Chief Engineer for Irrigation.

29th March 1899.

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

Order—No. 305 I., dated 13th April 1898.

Communicated to the Superintending Engineer, III Circle, for information and guidance.

(True Extract.)

(Signed) W. HUGHES,
Joint Secy. to Government,
Irrigation Branch.

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

Order—Mis. No. 2530, Revenue, dated 16th June 1898.

Communicated to the Board of Revenue, whose attention is drawn to the remarks in paragraph 3 of the inspection notes.

(True Extract.)

(Signed) G. S. FORBES,
Secretary to Government.

To the Board of Revenue (Revenue Settlement,
Land Records and Agriculture).

Read—also the following Proceedings of the Board of Revenue (Revenue Settlement, Land Records and Agriculture), Mis. No. 2514, dated 22nd May 1899:—

Read—again the following Proceedings of the Board of Revenue (Revenue Settlement, Land Records and Agriculture), Mis. No. 447, dated 21st January 1899:—

Read—the following letter from H. O. D. HARDING, Esq., I.C.S., Acting Collector of Cuddapah, to the Secretary to the Commissioner of Revenue Settlement and Director of the Department of Land Records and Agriculture, dated 4th January 1899, Dis. No. 20/D.-Rev.:—

With reference to Board's Proceedings, Mis. No. 7197, dated 14th December 1898, calling for my remarks in reference to paragraph 3 of the Chief Engineer's inspection notes on the Kurnool-Cuddapah canal, I have the honour to remark as follows.

Further remarks are probably hardly required from me as to why the canal does not pay so well in Kurnool. I entirely agree with the opinion expressed by the Chief Engineer on that matter and consider there is no room for any other opinion. The

Referring to Board's Resolution, Mis. No. 7197, dated the 14th ultimo, I have the honour to submit that the probable future increase of 1,000 acres a year under *regular* irrigation, anticipated by the Chief Engineer in paragraph 3 of his inspection notes, seems somewhat above the mark to my humble mind, and I think it would be safer to put it down as 500 acres at the most, considering that almost all minor channels or extensions of such channels asked for by ryots, especially of the Proddatur and Cuddapah taluks, have already been given, and that extension of *regular* irrigation in the case of the Kurnool district and in the few canal villages of the Jammalamadugu taluk of the Cuddapah district is naturally backward and slow in consequence of "scantiness of population and abundance of land suitable for growing good dry crops in ordinary seasons"—reasons already mentioned by the Chief Engineer. Of course there are within the limits of the Cuddapah district one small and two big projects in connection with this canal now under investigation of the Public Works Department, I mean the Chinnachouku and the Maidukur and Chapad projects, which, if sanctioned and executed, are expected to bring about some large and permanent increase of about 12,000 to 15,000 acres at least with prospects of further increase; but as they are rather important projects which may naturally take some pretty good length of time to be sanctioned, begun and completed, I beg to add that I have not taken the increase connected

District.	Taluks.	Area.
		acs.
Kurnool ..	Rámallakót	629-87
	Nandikótkur	30,212-23
	Nandyal	32,253-83
	Sirvél	48,330-98
	Koilkuntla	25,316-83
District total ..		136,743-24
Cuddapah ..	Jammalamadugu	8,133-17
	Proddatur	15,359-1
	Cuddapah	12,408-35
District total ..		35,900-53
Canal total ..		172,643-77

District.	Taluks.	Area.
		ACS.
Kurnool ..	{ Rámallakót	629.37
	{ Nandikótkur	30,212.23
	{ Nandyál	32,253.83
	{ Sirvéi	48,330.98
	{ Koilkuntla	25,316.83
District total ..		136,743.24
Cuddapah ..	{ Jammalamadugu	8,133.17
	{ Proddatur	15,359.1
	{ Cuddapah	12,408.35
District total ..		35,900.53
Canal total ..		172,643.77

have been possible to safely famine-insure at least some 30,000 or 35,000 acres of commanded area favourably situated in the higher up reaches of the canal for the term of one settlement; but there are, as already stated in paragraph 1 *supra*, three promising projects connected with the canal under investigation in the Cuddapah district, and, should they eventually be sanctioned and executed, I do not think it would be advisable or safe to impose the proposed insurance charge on any extent at all under the canal; and in that case it seems certainly better to leave matters as they are, simply trans-

District.	Taluku.	Extent.
Kurnool	Ramallakot	940.42
	Nandikotkur	3,668.98
	Nandyal	2,229.7
	Sirvel	2,587.48
	Koilkuntla	225.33
District total		9,651.28
Cuddapah	Jammalamadugu	3,464.91
	Proddatur	4,571.23
	Cuddapah	8,036.14
District total		17,687.42
Canal total		17,687.42

fering to permanent wet at the ensuing re-settlement such canal-commanded areas as may be found fit for conversion on the lines already laid down by the Board in its Proceedings, No. 354, dated 31st August 1894, and No. 436, dated 15th October 1894, or on any other lines that the Board may think fit to fix hereafter. According to lists prepared on the lines already fixed by the Board, the total area fit for transfer to wet comes to acres 17,687.42 as detailed in the margin.

4. The Chief Engineer seems to think that it would be better and more convenient if "some change can be made in the time of cultivation and crops sown without waiting for local rains if they should be late"; but, from my past experience of the canal and of the methods of cultivation prevailing thereunder, I feel quite sure that the ryots will never do that in the case of dry crops, nor would they listen to any such proposal; and there seem to be reasons why they would not view any such proposal with favour. Within the limits of the Proddatur and Cuddapah taluks, a reasonably good proportion of the canal-commanded area is already coming in for canal water for some crops or other, and it is mainly in the canal taluks of the Kurnool district and in the Jammalamadugu taluk that there is available an enormous dry crops extent under the canal; and nearly the whole of that dry crops extent being generally of rich black regar soil fit for cotton, cholan and other "hingari" or the later crops, the ryots, in case the monsoon is late or fails partly or in whole, naturally reserve such lands for the "hingari" crops; and however steadily the first monsoon rains may hold back or however deficient they may be, I feel sure that the ryots will not think of taking canal water for the "bagayat" or garden and for dry crops till about the end of August. Of course in the case of the Rs. 6 and Rs. 4 rate crops which, strictly speaking, are pure wet crops, the case is different, and ryots will have no objection to promptly use canal water for them when rains fail or are late, but the Chief Engineer's proposal is in connection with *dry* crops and does not apply to crops under systematic or regular irrigation. Another point which the ryots consider and which disfavours the Chief Engineer's proposal is the fact that what they call "పైకట్టు", or a fall of rain immediately following the sowing of a crop on land artificially irrigated, almost invariably prevents the crop sown from either sprouting or from luxuriantly growing up if already sprouted. Even in the case of dry crops sown without artificial irrigation and with the aid of rains exclusively, a rain following sowing almost on its heels affects the crop sown, and sometimes it is even found necessary by ryots to spoil the first-sown crop altogether and put in seed again; and, in such cases, in addition to losing labour, the ryots sustain loss in the shape of losing seed-grain also. The fact that they will have to unnecessarily pay water-rate for a flooding prematurely taken is also a point which seems to weigh in the ryots' mind against following the course suggested by the Chief Engineer.

APPENDIX A.

Fasli 1304.												Fasli 1305.											
District.	Taluk.	Rs. 6.	Rs. 4.	Rs. 3.		Rs. 2.	Rs. 1.	Total.	Rs. 6.	Rs. 4.	Rs. 3.		Rs. 2.	Rs. 1.	Total.								
				Second crop paddy.	Bagayat.						Second crop paddy.	Bagayat.											
Kurnool.	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16								
	Ramallakot	ACS. 160-93	ACS. 1,388-13	ACS. 238-03	ACS. 640-92	ACS. 289-32	ACS. 150-52	ACS. 2,578-53	ACS. 172-40	ACS. 1,218-33	ACS. 175-83	ACS. 444-88	ACS. 193-87	ACS. 108-17	ACS. 2,119-56								
	Nandikotkur	20-43	3,648-65	232-19	1,405-92	946-13	6,542-64	18-03	3,666-89	157-29	704-90	193-87	1,063-51	5,794-49									
	Nandyal	6-09	1,611-45	160-59	414-27	745-39	3,837-81	3-20	1,895-72	306-78	159-47	600-66	475-51	3,431-34									
	Sirvel	6-46	1,167-27	128-39	577-87	990-38	3,496-38	7-68	1,157-34	35-95	436-38	93-79	3,540-52										
	Koilkuntla	2-47	225-57	70-78	155-16	22-91	519-81	2-47	132-63	32-85	67-66	15-22	93-37	404-20									
District Total		196-38	8,041-07	829-98	3,197-14	2,202-63	2,507-97	16,975-17	203-78	8,120-91	708-70	1,813-24	1,764-13	2,679-35	15,290-11								
Cuddapah.	Jammalamadugu	30-55	2,757-50	3-0	3,374-87	515	164-58	172-73	29-38	2,780-90	2-66	2,990-77	90-37	1,048-45	6,942-53								
	Proddatur	21-54	5,656-47	3-35	3,441-06	0-58	485-97	9,608-97	16-18	5,744-45	0-85	3,912-82	7-69	692-01	10,374-0								
	Cuddapah	52-09	8,423-97	3-35	6,818-93	58-63	1,183-96	16,540-93	45-56	8,525-35	3-51	6,903-59	111-01	1,899-82	17,488-84								
Canal Total		248-47	16,465-04	833-33	10,016-07	2,261-26	3,691-93	33,516-10	249-34	16,646-26	712-21	8,716-83	1,876-14	4,579-17	32,778-95								
Fasli 1307.																							
District.	Taluk.	Rs. 6.	Rs. 4.	Rs. 3.		Rs. 2.	Rs. 1.	Total.	Rs. 6.	Rs. 4.	Rs. 3.		Rs. 2.	Rs. 1.	Total.								
				Second crop paddy.	Bagayat.						Second crop paddy.	Bagayat.											
Kurnool.	1	17	18	19	20	21	22	23	24	25	26	27	28	29	30								
	Ramallakot	ACS. 126-83	ACS. 1,444-67	ACS. 466-15	ACS. 457-82	ACS. 275-57	ACS. 958-16	ACS. 3,453-63	ACS. 120-98	ACS. 1,633-50	ACS. 595-39	ACS. 423-92	ACS. 654-44	ACS. 3,428-23									
	Nandikotkur	33-33	3,569-11	429-61	1,328-13	834-53	21,084-71	26,720-46	29-33	4,290-05	647-89	1,358-37	2,820-59	9,505-15									
	Nandyal	8-73	2,920-31	74-59	754-08	929-79	10,429-83	14,332-37	9-68	2,320-42	501-50	2,44-49	1,018-87	4,888-05									
	Sirvel	8-83	1,098-49	8-75	1,310-98	1,929-79	10,409-93	14,766-77	11-51	1,322-81	43-25	1,606-61	2,263-64	7,650-78									
	Koilkuntla	2-47	208-42	11-76	114-94	33-21	5,974-35	6,345-15	3-52	241-92	35-69	181-61	135-28	286-28	884-30								
District Total		180-19	8,511-0	990-86	3,975-95	3,073-40	48,856-98	65,618-38	174-92	9,808-70	1,823-72	3,815-0	3,551-04	7,183-14	26,356-52								
Cuddapah.	Jammalamadugu	81-02	3,270-72	7-65	3,152-48	10-71	704-91	738-04	30-55	2,780-90	2-66	2,990-77	90-37	1,048-45	6,942-53								
	Proddatur	59-72	4,965-68	7-81	4,094-58	..	1,658-95	10,785-64	41-87	5,048-07	2-52	4,374-87	5-42	1,356-51	10,899-26								
	Cuddapah	141-34	8,236-40	14-96	7,269-48	10-71	5,935-69	21,008-58	138-41	8,558-60	4-25	7,694-05	48-79	4,111-56	20,655-66								
Canal Total		321-53	16,777-40	1,005-82	11,245-43	3,084-11	54,792-67	87,226-96	313-33	18,467-30	1,827-97	11,509-05	3,569-83	11,294-70	47,012-18								

Resolution—Mis. No. 868, dated 10th February 1899.

Recorded, pending receipt of report from the Collector of Kurnool.

(True Copy and Extract.)

(Signed) R. V. SRINIVASIAH,
Secretary.

Copy to the Deputy Commissioner of Revenue Settlement,
Party No. I, in continuation of Board's Proceedings,
No. 38, dated 4th February 1899.

Read—also the following letter from MUHAMMAD RAZA KHAN, Esq., Collector of Kurnool, to the Secretary to the Commissioner of Revenue Settlement and Director of the Department of Land Records and Agriculture, dated 13th March 1899, R.C. No. 1350-B and G:—

Adverting to Board's Proceedings, Mis. No. 7197, dated 14th December, 1898, I have the honour to report as follows.

2. In the opening portion of paragraph 3 of his inspection notes, the Chief Engineer says that the best opinion seems to be that the regular irrigation under the Kurnool-Cuddapah canal will continue to increase steadily and the increase is likely to amount to about 1,000 acres a year until the limit is reached. I am, however, unable to concur in this view. In the area commanded by the canal in this district, the regar soil lands predominate; this circumstance and the scantiness of population in the tract traversed by the canal render the chances of any considerable increase under irrigation remote. I append hereto a statement showing the extents irrigated from fasli 1303 to fasli 1307 under the canal. It will be seen therefrom that the area under Rs. 6 and Rs. 4 rates showed no appreciable increase in any year and the extents under the garden crops, the resorting to which by the ryots depends largely on the prices which rule at the beginning of the agricultural year, fluctuated considerably irrespective of the nature of the season. Regarding dry crops, no water is likely to be taken for them unless the rains fail and no reliable estimate can be formed of the extent under such crops which will be regularly irrigated. In these circumstances, I am of opinion that the increase in irrigation under the canal in normal years will be but inappreciable.

3. Concerning the imposition of famine insurance rates, I think the first step to be taken is to ascertain (1) the area already irrigated and that irrigable by the canal and which is fit for cultivation, and (2) the extents to be permanently classed as wet.

It appears to me that, considering the circumstances of this district, it will be possible to give the assurance of protection against famine in the case of some area—some thousands of acres—the details of which will have to be carefully worked out after thorough inspection of the localities concerned; but if the projects in the Cuddapah district should be completed and the area of wet extent under the canal should thereby be considerably augmented, it would perhaps be advisable to drop the subject of famine insurance altogether for the time being. Any extents that might regularly be benefited by the canal in times of drought in addition to the wet lands including those covered by the Cuddapah projects might be watched and charged tirwajasti, and should it then be considered necessary to impose an insurance rate, the question might be re-opened.

4. As for the proposal that cultivators might be induced to utilize canal water ere sowing and when water is plentiful in the canal, I do not think the suggestion is one that will be adopted by the ryots. They have been accustomed to sow certain crops in certain parts of the year from time out of mind, and their firm belief is that if the usual practice is followed, their agricultural operations are likely to be successful. Secondly, as above mentioned, most of the lands commanded by the canal are of regar soil and the ryots can afford to wait till about the middle of October when the cultivation of such lands generally commences. Thirdly, the cultivators run the

risk of having their crops seriously damaged, if after the artificial watering suggested by the Chief Engineer there should be, as might very often happen, a heavy fall of rain especially when the plants begin to sprout, or are very tender. The Executive Engineer may, however, be asked to try the experiment on a few acres of land in different villages in a series of seasons and the results watched and, if favourable, widely published.

5. Referring to the concluding portion of paragraph 3 of the Chief Engineer's note, I do not think it equitable to impose the limitation recommended by him. If additional assessment be charged, water must be guaranteed when the ryots require it for saving their crops, and there must be no restriction as to the time when it could be supplied.

ENCLOSURE.

STATEMENT showing the area irrigated under the Kurnool-Cuddapah Canal in the Kurnool district.

Fasli.	Wet and Bagayat crops.					Dry crops.	Total.
	Rs. 6 rate.	Rs. 4 rate.	Rs. 3 rate.		Rs. 2 rate.	1 rupee.	
			Second crop.	Bagayat.			
	ACS.	ACS.	ACS.	ACS.	ACS.	ACS.	ACS.
1303	209.27	8,136.14	1,019.11	1,502	457.70	2,886.27	14,210.49
1304	196.38	8,041.7	829.98	3,197.14	2,202.63	2,507.97	16,975.80
1305	203.78	8,120.91	708.70	1,813.24	1,764.13	2,679.35	15,290.11
1306	180.19	8,541.00	990.86	3,975.95	3,073.40	48,856.98	65,618.38
1307	174.92	9,808.70	1,823.72	3,815.00	3,551.4	7,183.14	26,356.52

Resolution—Mis. No. 2514, dated 22nd May 1899.

The papers read above will be submitted to Government with reference to G.O., Mis. No. 2530, dated 16th June 1898.

2. The Special Deputy Collector and the Collector of Kurnool consider as excessive the estimate referred to in the Chief Engineer's inspection notes, that regular irrigation under the canal will increase annually by 1,000 acres. The Deputy Collector is of opinion that, if certain projects contemplated in Cuddapah are left out of account, the increase can be put down safely at only 500 acres per year, while the Collector of Kurnool thinks that in his district the increase in normal years will be inappreciable. The Board does not think that there are sufficient data for expressing an opinion on these estimates.

3. The most important point discussed by the Chief Engineer in his inspection notes relates to the proposal to charge "insurance" rates at the next re-settlement on dry lands commanded by the canal. The suggestion was made by Government in its Order, No. 3943, dated 11th October 1894, and was fully discussed in the papers regarding the re-settlement of Kurnool dealt with in G.O., No. 18, dated 18th January 1896. The view expressed by Government in that order is that, if after the distributary channels and the areas irrigable under each have been mapped out the Public Works Department could say what fraction of the area is securely irrigable in seasons of drought and where that fraction should be located, it would then be possible to give effect to a scheme of charging "insurance rates." From the half-yearly progress reports of the Special Deputy Collector in charge of the canal, it appears that he was called upon by the Public Works Department to furnish lists of lands which may be transferred to wet and of lands on which the insurance rate may be charged, and that the lists have been furnished by him for most of the villages commanded by the canal. What conclusion the Public Works Department has come to on an examination of these lists, is not known.

4. The opinion expressed by the Chief Engineer in his inspection notes is that the proposal to give a guarantee for dry lands against loss by drought should be viewed with great caution, because, he says, water will be taken for such lands only when all hope of rain has failed and the crops are withering; and as the river supply

will be running short at the time, and wet lands will have the first claim for water, the supply available for dry lands will then be limited. He observes at the same time that early in the season there is abundance of water and that if ryots would make a change in the time of their cultivation, and would take water when there is plenty of it and irrigate their lands before sowing, a very little rain subsequently would suffice to bring the crops to maturity.

5. The Special Deputy Collector states that, according to the lists prepared by him, the total area commanded and commandable by the canal and connected works as they now exist is 172,644 acres, that if only the probable future increase in regular irrigation under these works have to be taken into consideration, it may be possible to guarantee water for about 35,000 acres, in the higher reaches of the canal, but that in view of certain new projects proposed in the Cuddapah district, which if executed would bring about 15,000 acres under wet cultivation it would be inadvisable to undertake any responsibility such as is involved in the famine insurance scheme. The Collector of Cuddapah remarks that water can be guaranteed for dry crops only at the expense of wet crops lower down, that the most profitable use of the canal in his district is to extend wet cultivation, as ryots can and will raise good wet crops, that the ultimate wet area to be irrigated cannot be known for many years to come and that till it is known, water should not be guaranteed for dry crops. The Collector of Kurnool also refers to the projects contemplated in the Cuddapah district, and remarks that if they are to be carried out, it would be advisable to drop the proposal of famine insurance rate for the present.

6. It will be seen from paragraph 28 of Mr. Cobb's report and paragraph 11 of Board's Proceedings, No. 28, dated 8th February 1895, printed in G.O., No. 18, dated 18th January 1896, that the difficulty that water will be required only late in the season was duly considered, and that it was therefore proposed that the area on which the insurance rate should be charged should be fixed with reference to the supply available in the months of October, November and December in which the dry crops are in jeopardy in seasons of drought. It will also be seen that the necessity for determining what areas should be permanently charged as wet and how much water should be set aside for its effectual irrigation before fixing the area for "insurance" charge was recognized and that it was for this reason that lists of lands to be registered as "wet" were proposed to be prepared. As these lists appear to have been completed by the Special Deputy Collector for most of the villages and furnished to the Executive Engineer and as the maps ordered in paragraph 4 of G.O., No. 18, dated 18th January 1896, also appear to have been prepared, it ought to be practicable for the Public Works Department to say whether it is possible to fix the area for which water can be guaranteed, due allowance being made for the new projects in Cuddapah referred to by the Special Deputy Collector.

7. In reference to the suggestion that ryots might be induced to take water for dry lands before sowing, the Special Deputy Collector, who has intimate knowledge of the ryots, feels quite sure that they will never adopt this course as the lands commanded which, he says, lie chiefly in the Kurnool district and in the Jammalamadugu taluk of Cuddapah are mostly of rich black regar soil, such as is reserved for cotton, cholum and other late crops, in case the early rains fail. The Deputy Collector also states that a fall of rain immediately following the sowing of dry crops on artificially-irrigated land is believed to prevent sprouting or luxuriant growth, that sometimes it is even found necessary to re-sow the lands, and that in such cases ryots will lose seed and cost of labour.

(True Copy and Extract.)

(Signed) C. BENSON,
Deputy Director,
for Secretary.

To the Secretary to Government, Revenue Department,
with copies of Board's Proceedings, Mis. Nos. 447 and 868,
dated 21st January and 10th February 1899.

Copy to the Collectors of Kurnool and Cuddapah.
" " Special Deputy Collector, Kurnool-Cuddapah Canal.
" " Deputy Commissioner of Revenue Settlement, No. I Party.
" " Chief Engineer for Irrigation.

ORDER—No. 491, Revenue, dated 26th July 1899.

Irrigation No. 11.

Recorded.

2. The question of charging an insurance rate in respect of the lands to which irrigation from the canal can be assured in all seasons will, for the present, be dropped.

(True Extract.)

for Ag. Secretary to Government.

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

Erd. A. Rungasami Aiyangar.

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Kurnool-Cuddapah Canal.

Recording Board's Proceedings reporting on the opinion expressed by the Chief Engineer for Irrigation that the regular irrigation under the — would continue to increase steadily by about 1,000 acres a year until the maximum limit is reached ; and stating that the question of charging an insurance rate in respect of lands to which irrigation from the canal can be assured in all seasons will, for the present, be dropped.

Kurnool-Cuddapah Canal.

Recording Board's Proceedings reporting on the opinion expressed by the Chief Engineer for Irrigation that the regular irrigation under the — would continue to increase steadily by about 1,000 acres a year until the maximum limit is reached ; and stating that the question of charging an insurance rate in respect of lands to which irrigation from the canal can be assured in all seasons will, for the present, be dropped.