Public Works (1897) Department.

G.O., No. 274-5 9

DATED 17 march 1897

19/3/97

[Despatch Abstract.]

Reservoir on the Tungabhadra river: Approving the recommendations of the Chief Engineer for Irrigation that the investigation of the proposed Sugur project be not proceeded with and that authority be given to investigate a project for forming a — near Nadivi village, 5 miles below Sugur in Bellary Dt and directing that the Residential Engineer be addressed on the subject.

Reservoir on the Tungabhadra river: Forwarding Gov't of Bom: regarding the formation of a — near Nadivi village 5 miles below Sugur in Bellary Dt and requesting that the Nizam's Govt be moved to grant permission to obtain at this Govt's expense the necessary survey and borings of His Highness' territory and to dig trial pits on the proposed line of bund.

[illegible] 1-8-97

19/3/97

irrigation

BACK PAPERS.

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

FURTHER PAPERS.

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

IRRIGATION.

Government {1897} of Madras.

PUBLIC WORKS.

Recd. } 1897. *Enclosures*

Regd. } *Spare copies*

Letter, No. 275 I., 17th March 1897.

MARCH.

Reservoir on the Tungabhadra river

Forwarding copy of Proceedings regarding the formation of a — near Nadivi village, 5 miles below Sugur in Bellary district, and requesting that the Nizam's Government be moved to grant permission to officers of this Government to make the necessary survey and contours of His Highness' territory and to dig trial pits on the proposed line of bund.

PUBLIC WORKS DEPARTMENT.

Irrigation.

LETTER—from

W. HUGHES, ESQ., B.A.,
Joint Secretary to the Government of Madras,
Public Works Department,
Irrigation Branch.

To

THE RESIDENT AT HYDERABAD.

SIR,

I am directed to forward a copy of the Proceedings of this Government, No. 274 I., dated 17th March 1897, regarding the formation of a reservoir on the Tungabhadra river near the village of Nadivi, 5 miles below Sugur in the Bellary district, and to request that you will be so good as to move His Highness the Nizam's Government to grant its permission to the officers of this Government to make the necessary survey and contours of His Highness' territory, the position of which is shown approximately in yellow on the accompanying * Atlas sheet, and to dig trial pits on the proposed line of bund.

* To be kindly returned with your reply.

I have the honour to be,
Sir,
Your most obedient servant,

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

FORT ST. GEORGE,
17th March 1897.

Exd. T. K. Narayana Aiyangar.

IRRIGATION.

Government {1897} of Madras.

PUBLIC WORKS.

Recd. } 1897. *Enclosures*
Regd. } *Spare copies*

G.O., No. 274 I., 17th March 1897.

MARCH.

Reservoir on the Tungabhadra river

Approving the recommendations of the Chief Engineer for Irrigation that the investigation of the proposed Sugur project be not proceeded with and that authority be given to investigate a project for forming a — near Nadivi village, 5 miles below Sugur in Bellary district, and directing that the Resident at Hyderabad be addressed on the subject.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.

Read—the following papers :—

From the Superintending Engineer, III Circle, dated 17th July 1894, No. 993.
To " " III " " 8th Aug. " " III/17 B.L.

From W. B. deWINTON, Esq., Superintending Engineer, III Circle, to the Chief Engineer for Irrigation, dated 22nd February 1897, No. 4118 I.

With reference to correspondence ending with your No. III/17 B.L., dated 8th August 1894, I have the honour to report that I have just inspected the Sugur project, the investigation of which has been in abeyance for sometime for want of a subordinate to undertake the work.

2. The project originated during the famine of 1891–92 in the desire of Lord Wenlock to see other irrigation channels taken off from the Tungabhadra river in the Bellary district in addition to those already existing, with the double object, I presume, of finding employment for famine relief workers, and of preventing famine on the river margin in future.

3. The project, as proposed, provides for the following :—

(1) The restoration of an old existing anicut across the Tungabhadra river near the village of Sugur in the Bellary taluk of the Bellary district, in latitude 15° 29′ and longitude 76° 48′.

(2) The excavation of a channel therefrom down the right bank of the river for a distance of 37 miles to the junction of the Hagari river with the Tungabhadra in latitude 15° 44′ 30″, longitude 76° 59′ 30″, to irrigate 8,000 acres of land, composed principally of black cotton soil.

4. It was roughly estimated that the project would cost Rs. 3,53,000 and pay 11·3 per cent. by charging a wet assessment of Rs. 6 on the 8,000 acres.

5. I have inspected the anicut and the first 12 miles of the proposed channel. I have also been over the country which would be irrigated by the last 15 miles of the channel, which lies above and beyond that now irrigated by the Siruguppa channel.

6. The results of my inspection are as follow :—

(1) The anicut is one of the rough stone structures, common to the Tungabhadra, whose stability in face of the heavy floods they have to withstand is always a marvel to me. Like all these anicuts there is no record of the date of its construction, and from the appearance of the old channel leading from it, I should think it breached as soon as, or before, it was completed and was never used for irrigation purposes.

It is 1,590′ long, 30′ wide and 9′ high and is composed of large boulders which were, to some extent at any rate, imbedded in some cement which is of adamantine hardness at the present day. Local tradition says the cementing material was bad; but I could see no proof of this. The right half of the anicut is in fairly good order, having only one small breach some 40′ wide in it. The left half, which is in Hyderabad territory, is breached almost continuously. The anicut rests on a rocky bed. It would probably cost Rs. 20,000 to restore it.

(2) The channel as proposed would take off from the right flank, and run for 1½ miles in the river margin, over rocks and boulders. There are traces of an old channel here now, taking off with a cut through solid rock, 7′ wide. This portion of the channel would be exposed to every flood and would have to be provided with a masonry wall on its left side.

At 1½ miles the line leaves the margin and enters the river bank which it hugs for the first 7 miles, where there is little or no cultivation, what ground there is between the channel and the river being undulating and unsuited for wet cultivation. From 7 miles onwards it runs more inland and would command a considerable area of land suitable for irrigation in the villages of Uddagollem, Nitturu, &c. Of the 8,000 acres it is proposed to irrigate, 5,000 lie in the first 33 miles of the channel and 3,000 in the last 4 miles.

The channel is laid out on a falling contour of 6″ per mile, except at 16th and 33rd miles, where it is dropped 8′ and 10′, respectively, to avoid banking. It would cross nine large drainage streams varying in width from 70′ to 200′ and in depth from 2′ to 16′, besides numerous smaller ones.

The line of channel has been surveyed and roughly levelled and the levels entered on the survey. All that remains to be done is to locate the line accurately, take proper levels and make a regular estimate. The ryots on the line, so far as my enquiries went, expressed their desire to take water for cultivation if given.

7. I do not think the project, as at present proposed, worth further consideration, for the following reasons :—

(1) The anicut is a somewhat flimsy structure, which ought to be entirely remodelled before it could be considered sufficiently stable to ensure its longevity.

(2) The first 1½ miles of the channel run through ground as bad for the purpose as ground could be and would be exposed to every river fresh.

(3) There are two large drainages to cross in the 2nd and 3rd miles which would require expensive masonry works.

(4) The line as laid out hugs the river bank much too closely in the first 7 miles and would be exposed to damage from floods, and subject to considerable loss of water by percolation back into the river. To take it further inland would mean heavy cutting and additional expense.

(5) The channel will irrigate little land in its first 7 miles.

(6) Although there is ample water in the Tungabhadra from June to December for a considerable increase of irrigation from January to June, every drop is at present fully utilized; and I think that, except for purposes of storage, it would be a mistake to throw another barrier across the river whose effect would be to diminish the already scanty supply to the Siruguppa and Rampur channels and the Kurnool-Cuddapah canal. With reference to the remark on this subject made in your letter under reply, the Hagari is by no means to be depended upon at any time as a source of supply, and is at the present moment practically dry.

8. There is, however, another scheme in the vicinity, which I think more worthy of investigation. There is a natural barrier across the Tungabhadra river near the village of Nadivi, 5 miles below Sugur in latitude 15° 30′ and longitude 76° 52′. It is composed of huge rocks of red granite, running right across the river and holding up water naturally to such an extent that there was a difference of water level of 11 feet above and below it, when levels were taken by Surveyor McGrath. There is also, in a line with this barrier, a range of hills on the left bank (Hyderabad territory) coming within a mile of the river, and on the right bank two low quartzite hills within one-quarter mile.

I have been on the look-out on my journey up the Tungabhadra from Kurnool for some place at which it would be possible to store water for second crop under the Kurnool-Cuddapah canal, of which it is very much in need; and the place above described shows considerable promise in that respect.

9. I therefore propose, with your permission, to have a survey made and contours run to see if it is possible, at a reasonable cost, to hold up water sufficient for 20,000 acres or thereabouts of second crop under the Kurnool-Cuddapah canal. The channel referred to in the first part of this letter might also be started from the reservoir with much greater prospect of success.

10. Of course, the scheme could not be carried out, however promising, unless the Hyderabad Government is a consenting party, because a strip of Hyderabad territory probably not exceeding two square miles, with one small village, would be submerged. In British territory also only one small village would be submerged and no land of any value.

11. I therefore beg, if you approve of the further action I propose, that you will be good enough to address the Government of His Highness the Nizam of Hyderabad, with a request that they will permit us to make the necessary survey and contours of their territory, the position of which is shown approximately in yellow on the accompanying atlas sheet. I should also want permission to dig trial pits on the proposed line of bund.

No. 55 I.

Submitted to Government.

2. For the reasons given by the Superintending Engineer, the undersigned agrees with him that it is not worth while to proceed further with the investigation of the proposed Sugur project.

3. There is, however, more promise of success in the other scheme brought to notice in paragraph 8 of the Superintending Engineer's letter of the 22nd February last. It is recommended that authority be given to proceed with the investigation of this project, and His Highness the Nizam's Government be moved for permission to carry on the investigation of that part of it which lies in Hyderabad territory.

9th March 1897.

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

ORDER—No. 274 I., dated 17th March 1897.

The recommendations of the Chief Engineer for Irrigation are approved and the following letter will be forwarded to the Resident at Hyderabad.

[Here enter No. 275 I., dated 17th March 1897.]

(True Extract.)

Under Secretary to Government,
Irrigation Branch.

To the Superintending Engineer, III Circle.
" Chief Engineer for Irrigation, with copy of letter to the Resident.
" Revenue Department.

Exd. T. K. Narayana Aiyangar.

His Excellency the Governor

No 274 I dy 17-3-97

Formation of a reservoir on the Sugur river near the village of Karudi 5 miles below Lingsugur.

PUBLIC WORKS DEPARTMENT,

IRRIGATION BRANCH.

Public works (1897) Department

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Current No. 2758

UNDER date the Read: 16.3.97

READ the following

Enclos: 6 (+2 Plans)

From the Supdg. Engineer, Third Circle. (His No. 993 dated 17 July 1894).
To ——— do ——— do ——— (His No. III dated 8 Aug. 1894).
From ——— do ——— do ——— (His No. 418 I. dated 22 Feby. 1897).

17-BL

No 55 I dy 9-3-97

Submitted to Government.

2. For the reasons given by the Supdg. Engineer, the undersigned agrees with him that it is not worthwhile to proceed further with the investigation of the proposed Sugur project.

3. There is, however, more promise of success in the other scheme brought to notice in para 8 of the Supdg. Engineer's letter of the 22d February last. It is recommended that authority be given to proceed with the investigation of this project and His Highness the Nizam's Government be moved for permission to carry on the investigation of that part of it which lies in Hyderabad territory

Order

10. Of course, the scheme could not be carried out, however promising, unless the Hyderabad Government is a consenting party, because a strip of Hyderabad territory probably not exceeding two square miles, with one small village, would be submerged. In British territory also only one small village would be submerged and no land of any value.

11. I therefore beg, if you approve of the further action I propose, that you will be good enough to address the Government of His Highness the Nizam of Hyderabad, with a request that they will permit us to make the necessary survey and contours of their territory, the position of which is shown approximately in yellow on the accompanying atlas sheet. I should also want permission to dig trial pits on the proposed line of bund.

No. 55 I.

Submitted to Government.

2. For the reasons given by the Superintending Engineer, the undersigned agrees with him that it is not worth while to proceed further with the investigation of the proposed Sugur project.

3. There is, however, more promise of success in the other scheme brought to notice in paragraph 8 of the Superintending Engineer's letter of the 22nd February last. It is recommended that authority be given to proceed with the investigation of this project, and His Highness the Nizam's Government be moved for permission to carry on the investigation of that part of it which lies in Hyderabad territory.

9th March 1897.

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

Order—No. 274 I., dated 17th March 1897.

The recommendations of the Chief Engineer for Irrigation are approved and the following letter will be forwarded to the Resident at Hyderabad.

[Here enter No. 275 I., dated 17th March 1897.]

(True Extract.)

Under Secretary to Government,
Irrigation Branch.

To the Superintending Engineer, III Circle.
" Chief Engineer for Irrigation, with copy of letter to the Resident.
" Revenue Department.

Exd. T. K. Narayana Aiyangar.

His Excellency the Governor &c.

Formation of a reservoir on the Sugur river near the village of Hatnur 5 miles below Sugur.

PUBLIC WORKS DEPARTMENT,

IRRIGATION BRANCH.

No. 274 I dy 17-3-97

Public Works (1897) Department

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Current No. 2758

UNDER date the Recd: 16.3.97

READ the following

Encls: 6 (+2 Plans)

From the Supdg. Engineer, Third Circle. (His No. 993 dated 17 July 1894).
To ——— do ——— do ——— (His No. III / 17-Bl dated 8 Aug. 1894).
From ——— do ——— do ——— (His No. 418-I. dated 22 Feby. 1897).

No 55 I dy 9-3-97

Submitted to Government.

2. For the reasons given by the Supdg. Engineer, the undersigned agrees with him that it is not worthwhile to proceed further with the investigation of the proposed Sugur project.

3. There is, however, more promise of success in the other scheme brought to notice in para 8 of the Supdg. Engineer's letter of the 22nd February last. It is recommended that authority be given to proceed with the investigation of this project and His Highness the Nizam's Government be moved for permission to carry on the investigation of that part of it which lies in Hyderabad territory.

Order

Order thereon. No-274 dt/17.3.97

The recommendations of the Chief Engineer for Irrigation are approved and the following letter will be forwarded to the Resident at Hyderabad.

JJL
E/2
97

WH
9.3.97

No-275 dt/17.3.97

To The Resident at Hyderabad.

Sir,

I am directed to forward a copy of the Proceedings of this Government No. I. dated March 1897 regarding the formation of a reservoir on the Pungabuddha river near the village of Nadivi, 5 miles below Sugur in the Bellary district and to request that you will be so good as to move His Highness the Nizam's Government to grant its permission to the Officers of this Government to make the necessary survey and contours of His Highness' territory the position of which is shown approximately in yellow on the accompanying× Atlas Sheet, and to dig trial pits on the

× to be kindly returned with your reply.

A.G.H
13.3.97

To The Supg. Engineer, Third Circle.
" Chief Engineer for Irrigation with copy of letter to the Resident.
" Revenue Department.

DS
21/4/97

the proposed line of bund.

JJL
E/3
97

WH
9.3.97

D 21/4/97

WH 13/3/97 8/3/97

E. I. Form No. 1—500—3-12-96.

Public Works (189/) Department.

CURRENT No. 6. K. L

3

From The Superintg Engineer
Albert
Bellary

Order

No. 4118 I

Dated 22nd February 1897

Received 24. 2. 97

Registered

Enclosures 1

Spare copies

SUBJECT.

Sugur proj. N.
Reporting on the
investigation of

B R
24-2-97

BACK PAPERS.

No.	Date.
I 1748 L.	8.8.94

FORWARDER PAPERS.

No.	Date.

No 4118 I

Superintending Engineer's
Office III Circle.
22nd February 1897.

40

From

W. B. de Winton Esq,
Superintending Engineer,
III circle.

To

The Chief Engineer
for Irrigation,
Madras.

Sir,

With reference to Correspondence ending with your no III/1748 dated 8th August 1894 I have the honour to report that I have just inspected the Sugur Project, the investigation of which has been in abeyance for sometime for want of a Subordinate to undertake the work.

2. The Project originated during the famine of 1891-92 at the desire of Lord Wenlock to see other irrigation

BACK PAPERS.

No.	Date.
1748 L.	8.8.94

FORWARDER PAPERS.

No.	Date.

No 4118 I

Superintending Engineer's
Office, III Circle.
22nd February 1897.

40

From

W. B. de Winton Esq,
Superintending Engineer,
III circle.

To

The Chief Engineer
for Irrigation,
Madras.

Sir,

With reference to Correspondence ending with your no. III/1782 dated 8th August 1894 I have the honour to report that I have just inspected the Sugur Project, the investigation of which has been in abeyance for sometime for want of a Subordinate to undertake the work.

2. The Project originated during the famine of 1891-92 ~~in~~ the desire of Lord Wenlock to see other irrigation

BACK PAPERS.

No.	Date.
1748 L.	8.8.94

FORWARDER PAPERS.

No.	Date.

No 1118 I

Superintending Engineer's
Office, III Circle.
22nd February 1897.

40

From

W. B. de Winton Esq,
Superintending Engineer,
III circle.

To

The Chief Engineer
for Irrigation,
Madras.

Sir,

With reference to Correspondence ending with your no III/1748 L dated 8th August 1894 I have the honour to report that I have just inspected the Sugur Project, the investigation of which has been in abeyance for sometime for want of a Subordinate to undertake the work.

2. The Project originated during the famine of 1891-92 ~~in~~ the desire of Lord Wenlock to see other irrigation

irrigation channels taken off from the Tungabadra river in the Bellary District in addition to those already existing; with the double object, I presume, of finding employment for famine relief workers, and of preventing famine on the river margin in future.

3. The Project, as proposed, provides for the following

(1) The restoration of an old existing anicut across the Tungabhadra river near the village of Sugur in the Bellary Taluq of the Bellary District, in Latitude 15°-29' and Longitude 76°-48'.

(2) The excavation of a channel therefrom down the right bank of the river for a distance of 37 miles to the junction of the Hagri river with the Tungabhadra in Latitude 15°-44'-30", Longitude 76°-59'-30", to irrigate 8,000 acres of land, composed principally of black cotton soil.

4. It was roughly estimated that

C. 50

that the Project would cost Rs 3,53,00 and pay 11.3 % by charging a wet assessment of Rs 6 on the 8,000 acres.

5. I have inspected the anicut and the first 12 miles of the proposed channel. I have also been over the country which would be irrigated by the last 15 miles of the channel, which lies above and beyond that now irrigated by the Siruguppa channel.

6. The results of my inspection are as follow:—

(1) The anicut is one of the rough stone structures, common to the Tungabhadra, whose stability in face of the heavy floods they have to withstand is always a marvel to me. Like all these anicuts there is no record of the date of its construction, and from the appearance of the old channel leading from it, I should think it breached as soon as, or before, it was completed, and was never used for irrigation purposes.

It is 1590' long, 30' wide and

— 9' high and is composed of large boulders — which were, to some esctent at any rate, imbedded in some cement which is of adamantine hardness at the present day. Local Tradition says the cementing ma-terial was lead! but I could see no proof of this. The right half of the anicut is in fairly good order, having only one small breach some 40' wide in it. The left half, which is in Hyderabad Territory, is breached almost continuously. The anicut rests on a rocky bed. It would, probably cost Rs 20,000 to restore it.

(2) The channel, as proposed, would take off from the right flank, and runs for 1½ mile in the river margin, over rocks and boulders. There are traces of an old channel here now, taking off with a cut through solid rock, 7' wide. This portion of the channel would be exposed to every flood and would have to be provided with a masonry wall on its left side.

At

60

At 1½ miles the line leaves the margin and enters the river bank which it hugs for the first 7 miles, where there is little or no cultivation — what ground there is between the channel and the river being undu-lating and unsuited for wet cultivation. From 7 miles onwards it runs more inland and would command a considerable area of land suitable for Irrigation in the villages of — Uddagollem, Nitturetc. Of the 8,000 acres it is proposed to irrigate, 5,000 lie in the first 33 miles of the channel and 3,000 in the last 4 miles.

The channel is laid out on a falling contour of 6" per mile except at 16th and 33rd miles where it is dropped 8' and 10' respectively to avoid banking. It would cross 9 large drainage streams varying in width from 70' to 200' and in depth from 2' to 16', besides nume-rous smaller ones.

The line of channel has been surveyed and roughly levelled and the levelsentered in the Survey. All that remains to be done is to

locate

— 9' high and is composed of large boulders — which were, to some extent at any rate, imbedded in some cement which is of adamantine hardness at the present day. Local Tradition says the cementing material was lead! but I could see no proof of this. The right half of the anicut is in fairly good order, having only one small breach some 40' wide in it. The left half, which is in Hyderabad Territory, is breached almost continuously. The anicut rests on a rocky bed. It would, probably, cost Rs 20,000 to restore it.

(2) The channel, as proposed, would take off from the right flank, and runs for 1½ mile in the river margin, over rocks and boulders. There are traces of an old channel here now, taking off with a cut through solid rock, 7' wide. This portion of the channel would be exposed to every flood and would have to be provided with a masonry wall on its left side.

At

60

At 1½ miles the line leaves the margin and enters the river bank which it hugs for the first 7 miles, where there is little or no cultivation — what ground there is between the channel and the river being undulating and unsuited for wet cultivation. From 7 miles onwards it runs more inland and would command a considerable area of land suitable for Irrigation in the villages of — Uddagollem, Nilluru &c. Of the 8,000 acres it is proposed to irrigate, 5,000 lie in the first 33 miles of the channel and 3,000 in the last 4 miles.

The channel is laid out on a falling contour of 6" per mile except at 16th and 33rd miles where it is dropped 8' and 10' respectively to avoid banking. It would cross a large drainage stream, varying in width from 70' to 200' and in depth from 2' to 16', besides numerous smaller ones.

The line of channel has been surveyed and roughly levelled and the levels entered on the survey. All that remains to be done is to

locate

— 9' high and is composed of large boulders — which were, to some esctent at any rate, imbedded in some cement which is of adamantine hardness at the present day. Local Tradition says the cementing ma-terial was lead! but I could see no proof of this. The right half of the anicut is in fairly good order, having only one small breach some 40' wide in it. The left half, which is in Hyderabad Territory, is breached almost continuously. The anicut rests on a rocky bed. It would, probably cost Rs 20,000 to restore it.

(2) The channel, as proposed, would take off from the right flank and run for 1½ mile in the river margin, over rocks and boulders. There are traces of an old channel here now, taking off with a cut through solid rock, 7' wide. This portion of the channel would be exposed to every flood and would have to be provided with a masonry wall on its left side.

At

60

At 1½ miles the line leaves the margin and enters the river bank which it hugs for the first 7 miles, where there is little or no cultivation — what ground there is between the channel and the river being undu-lating and unsuited for wet cultivation. From 7 miles onwards it runs more inland and would command a considerable area of land suitable for Irrigation in the villages of — Uddagollem, Nitturetc.. Of the 8,000 acres it is proposed to irrigate, 5,000 lie in the first 33 miles of the channel and 3,000 in the last 4 miles.

The channel is laid out on a falling contour of 6" per mile except at 16th and 33rd miles where it is dropped 8' and 10' respectively to avoid banking. It would cross 9 large drainage streams, varying in width from 70' to 200' and in depth from 2' to 16', besides innume-rous smaller ones.

The line of channel has been surveyed and roughly levelled and the levelsentered in the survey. All that remains to be done is to

locate

locate the line accurately, take proper levels and make a regular estimate. The pyots on the line, so far as my enquiries went, expressed their desire to take water for cultivation, if given.

7. I do not think the Project as at present proposed worth further consideration, for the following reasons.

(1). The anicut is a somewhat flimsy structure, which ought to be entirely re-modelled before it could be considered sufficiently stable to ensure its longevity.

(2). The first 1½ miles of the channel run through ground as bad for the purpose as ground could be, and would be exposed to every river fresh.

(3) There are 2 large drainages to cross in the 2nd and 3rd miles which would require expensive masonry works.

(4) The line as laid out hugs the river bank much too closely

closely in the first 7 miles and would be exposed to damage from floods, and subject to considerable loss of water by percolation back into the river. To take it further inland would mean heavy cutting and additional expense.

(5) The channel will irrigate little land in its first 7 miles.

(6) Although there is ample water in the Tungabhadra from June to December for a considerable increase of Irrigation, from January to June every drop is at present fully utilized; and I think that, except for purposes of storage, it would be a mistake to throw another barrier across the river whose effect would be to diminish the already scanty supply to the Siruguppa and Rampur channels and the Kurnool-Cuddapah canal. With reference to the remark on this subject made in your letter under reply, the Hagari is by no means to be depended upon at any time as

a

a source of supply, and is at the present moment practically dry.

8. There is, however, another scheme in the vicinity, which I think more worthy of investigation. There is a natural barrier across the Tungabhadra river near the village of Nadivi, 5 miles below sugur in Latitude 15°-30' and Longitude 76°-52'. It is composed of huge rocks of red granite, running right across the river and holding up water naturally to such an extent that there was a difference of water level of 11 feet above and below it, when levels were taken by Surveyor Mc Gratth. There is also, in a line with this barrier, a range of hills on the left bank (Hyderabad Territory) coming within a mile of the river and on the right bank, 2 low quartzite hills within $\frac{1}{4}$ mile.

I have been on the look-out on my journey up the Tungabhadra from

3. 8p.

from Kurnool, for some place at which it would be possible to store water for 2nd crop under the Kurnool Cuddapah Canal, of which it is very much in need; and the place above described shews considerable promise in that respect.

9. I, therefore, propose, with your permission, to have a survey made and contours run to see if it is possible, at a reasonable cost, to hold up water sufficient for 20,000 acres or thereabouts of 2nd crop under the Kurnool-Cuddapah canal. The channel referred to in the first part of this letter might also be started from the reservoir with much greater prospect of success.

10. Of course the scheme could not be carried out, however promising, unless the Hyderabad Government is a consenting party, because a strip of Hyderabad territory probably not exceeding 2 square miles, with one small village, would

a source of supply, and is at the present moment practically dry.

8. There is, however, another scheme in the vicinity, which I think more worthy of investigation. There is a natural barrier across the Tungabhadra river near the village of Nadivi, 5 miles below sugur in Latitude 15°-30' and Longitude 76°-52'. It is composed of huge rocks of red granite, running right across the river and holding up water naturally to such an extent that there was a difference of water level of 11 feet above and below it, when levels were taken by Surveyor Mc Gratta. There is also, in a line with this barrier, a range of hills on the left bank (Hyderabad Territory) coming within a mile of the river and on the right bank, 2 low quartzite hills within $\frac{1}{4}$ mile.

I have been on the look-out on my journey up the Tungabhadra from

from Kurnool, for some place at which it would be possible to store water for 2nd crop under the Kurnool Cuddapah Canal, of which it is very much in need; and the place above described shews considerable promise in that respect.

9. I, therefore, propose, with your permission, to have a survey made and contours run to see if it is possible, at a reasonable cost, to hold up water sufficient for 20,000 acres or thereabouts of 2nd crop under the Kurnool-Cuddapah canal. The channel referred to in the first part of this letter might also be started from the reservoir with much greater prospect of success.

10. Of course the scheme could not be carried out, however promising, unless the Hyderabad Government is a consenting party, because a strip of Hyderabad territory probably not exceeding 2 square miles, with one small village,

would

would be submerged. In British territory also only one small village would be submerged and no land of any value.

11. I, therefore, beg, if you approve of the further action I propose, that you will be good-enough to address the Government of H.H. the Nizam of Hyderabad, with a request that they will permit us to make the necessary Survey and contours of their territory the position of which is shewn approximately in yellow on the accompanying Atlas sheet. I should also want permission to dig trial pits on the proposed line of bund.

I have the honour to be,
Sir,
Your Most Obedient Servant

H.B. Chrimtin
21.2.57
Supt dg Engineer, III Circle

T.S.
20/2/57

B.S.

CHIEF ENGINEER
FOR IRRIGATION.
FILE No.
No. 6. B1

P.W. E.5
2758/97

12