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REPORT OF THE IRRIGATION AND POWER TEAM
ON
NAGARJUNASAGAR PROJECT
(ANDHRA PRADESH)

COMMITTEE ON PLAN PROJECTS
NEW DELHI
JULY 1960

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LETTER OF TRANSMITTAL

No. COPP/I&P/7/59
COMMITTEE ON PLAN PROJECTS
YOJANA BHAVAN
Parliament Street,
NEW DELHI.
23rd July, 1960.

Dear Shri Pantji,

I have pleasure in forwarding to you the Report of the Irrigation & Power Team on the Nagarjunasagar Project. The study of the Project was initiated under the able Leadership of my predecessor, Shri N. V. Gadgil, who relinquished the Leadership on 26th September, 1959.

2. The Team prepared their preliminary Draft Report after visiting the Project site a number of times and discussing in detail the various issues with the Project Authorities. The same was forwarded to the Government of Andhra Pradesh on 2nd February and discussed with them on 25th and 26th March, 1960. The Report has been finalised in the light of decisions arrived at at that meeting.

3. Among the recommendations made by the Team, the following are the more important :—

- (i) Build the Dam to its final height in the first phase with sill of spillway gates lowered to R.L. 546 and defer installation of the spillway gates to the final phase.

This will enable storage of water to F.R.L. 546 and thereby ensure an annual irrigation of 18 lakh acres of first crop and 1.25 lakh acres of second crop as against an annual irrigation of not more than two-thirds of 18 lakhs of first crop and no second crop, which is all that can be secured by building the Dam to F.R.L. 525 as proposed in the project for the first phase.

The additional expenditure involved will be Rs. 2.5 crores.

- (ii) Increase, in the interest of safety, the spillway capacity by adding three bays to the 24 bays of 50 feet

each, making 27 bays in all and lower the sill of all the gates from R.L. 550 to R.L. 546, so that the gates will now be 44 feet instead of 40 feet in height.

If the results of certain suggested studies indicate the necessity for further increase in spillway capacity, this should be secured in the form of a saddle spillway on the left bank.

- (iii) Provide for developing in the first phase 100 M.W. of power.

The additional expenditure involved will be Rs. 4 crores and the additional revenue earned each year will be Rs. 70 lakhs, which will improve the financial return of the project.

- (iv) Lower the full supply level of the Left Bank Canal by 10 feet (by suitably widening the intake channel in the first phase and making provision for constructing a second tunnel in the second phase), thus enabling the reservoir storage between R.L. 520 and R.L. 510 to be utilised, thereby increasing the second crop irrigation by 42,000 acres per annum on the average.

- (v) Accept the proposal of the Project Authorities to design the Left Bank Canal for an ultimate (final stage) discharge of 15,000 cusecs and construct during the first phase all masonry works for this discharge of 15,000 cusecs but build the canal only for the first phase discharge of 11,000 cusecs.

This will provide additional annual irrigation of 3.5 lakhs below the point where the canal proposed for 11,000 cusecs will end. This additional irrigation will be feasible on the basis of 75 per cent dependability.

- (vi) Provide water for early sowing of cotton and for the irrigation of upper lands adjoining the distributaries (which under the project have been excluded) in addition and in preference to the lower valley lands and irrigate these later by lift of the sub-soil water thus eliminating the possibility of water-logging.

- vii) Plan all projects on the Krishna on the basis of 75 per cent dependability.

- (viii) Integrate operation of Nagarjunasagar Reservoir with the Srisaïlam Reservoir when constructed. This will result in an increase in annual irrigation of 3 lakhs of acres of second crop and power generation at Srisaïlam from 260 M.W. to 377 M.W. at 60 per cent load factor.
- (ix) Arrange early adjustment in the 1951 Award on the allocation of Krishna waters consequent on the re-organisation of States which has taken place since.
- (x) Prepare without delay a revised detailed project estimate incorporating all changes introduced by the Project Authorities to-date and those suggested by the Team.

4. I take this opportunity of thanking you for the constant interest you have taken in the Team's study and the guidance you have given me from time to time. I would also place on record the help and guidance which the Members of the Consultative Committee have given to the Team throughout.

Yours sincerely,
A. N. KHOSLA.

Shri Govind Ballabh Pant,
Home Minister,
Government of India,
NEW DELHI.

CONTENTS

CHAPTER	SUBJECT	PAGES
	Preface	(i) to (iii)
I.	Scope of the Project	1—3
II.	Availability of Water	4—6
III.	Feasibility of First Phase Project	7—18
IV.	Integration of Srisaïlam and Nagarjunasagar Projects	19—46
V.	Design Features	47—54
VI.	Construction Features	55—72
VII.	Phasing of Construction Programme	73—74
VIII.	Power Development	75—78
XI.	Construction Costs	79—90
X.	Irrigation Development and Agricultural Aspects	91—99
XI.	Summary	100—113
	Appendices	114—197

*Statement showing observations and recommendations of the Irrigation and Power Team along with comments of the Government of Andhra Pradesh.

*Being published separately.

MAPS AND CHARTS

Sl. No.	SUBJECT	FACING PAGE NO.
1.	Index Map of Nagarjunasagar Project	2
2.	Graph of Contents of Nagarjunasagar Reservoir	16
3.	Hydro-Power Development in Krishna Basin	22
4.	Graph of Contents of Srisaïlam Reservoir	26
5.	Surface Levels of Head Reach of Left Bank Canal	52
6.	One of the proposed Ayacut Plans of Matsavaram Distributary	94