



REPORT
ON
MINOR IRRIGATION WORKS
(Maharashtra State)

COMMITTEE ON PLAN PROJECTS
(Irrigation Team)
NEW DELHI
(October 1963)

Letter of Transmittal

M. THIRUMALA RAO, M.P.,
Leader, Irrigation Team.

COMMITTEE ON PLAN PROJECTS
PLANNING COMMISSION
NEW DELHI

October 29, 1963.

MY DEAR NANDA JI,

The Minor Irrigation Team of Committee on Plan Projects completed studies of minor irrigation works in the State of Maharashtra sometime ago, and a draft report was duly sent to the State authorities. Finalisation of the report remained pending for a long time for want of comments, from that end. Eventually, however, a mutual discussion at Bombay on 9th October, 1963 enabled us to issue this report, which is sent herewith for your perusal.

Among major States of India, percentage of irrigated area to the total area under plough, is the lowest in Maharashtra. The State authorities are, therefore, fairly alive to the problems of irrigation. Yet, field studies conducted on numerous minor irrigation works in different parts of the State go to indicate that their irrigation potential, is not utilised to a satisfactory extent. For example in Nagpur Irrigation Circle utilisation percentage of irrigation potential on minor irrigation reservoirs works out to only about 34.6 percent. Again, actual utilisation of irrigation potential over 146 Bandharas in various divisions of the State, averaged to 38.4 percent only.

The Team has also pointed out that building of Bandharas for irrigation in heavy rainfall coastal areas, is not a technically sound proposition. Streams there have generally no water left after the rainy season, while during rains their serviceability is negligible.

In Vidarbha region large quantities of water held by reservoirs built at considerable costs, just evaporate away into atmosphere because winter cropping is not practised in the area. This is a matter of serious concern. The Team has, therefore, made a number of suggestions enjoined in this report, indicating how agricultural production from these works could be optimised.

The Team has also indicated the need for modification in the existing rules so as to permit light lift irrigation in the head reaches of minor irrigation schemes, which otherwise have to transmit water over long distances to cater for flow areas only, thus involving heavy water losses in seepage and evaporation. The Team feels that dispersal of irrigation benefits over larger areas at the cost of precious water, does not seem to be a wholesome policy.

(ii)

In contour bunding and soil conservation measures Maharashtra State is leading other States of India, yet in the matter of levelling of fields, which is a pre-requisite for practising irrigated agriculture, there is not sufficient consciousness among the cultivators. The terrain being generally undulating and soil depths being limited, the need for levelling up and terracing of fields seems urgent.

Under Agricultural aspects one of the Team's recommendations is to advance the sowing season of cotton in irrigated tracts from June-July to April-May leading to greater production per acre. The Team has also suggested replacement of *Jowar* crop commonly grown in Maharashtra with other suitable crops, which do not denude the fertility of soils, as *Jowar* does.

Our thanks are due to the State authorities in Maharashtra for extending to us the fullest co-operation in conducting field studies on various types of minor irrigation works in the State, thus enabling us to present this report.

Yours sincerely,

M. THIRUMALA RAO

Shri Gulzarilal Nanda,
Minister for Home Affairs,
Government of India,
NEW DELHI.

PREFACE

Minor Irrigation Team appointed by the Committee on Plan Projects undertook the study of minor irrigation works in Maharashtra State as part of the programme laid down in the Terms of Reference communicated *vide* Committee on Plan Projects Memorandum No. COPP/(4)/17/58, dated the 4th August, 1958 appearing on page 62 of this Report. The Team comprised Dr. A. N. Khosla, Leader, Shri Lal Singh, Retd. Director of Agriculture, Punjab, Shri Baleshwar Nath, Chief Engineer (Addl.) Members and Shri Mahavir Prasad, Irrigation Adviser, Ministry of Food and Agriculture, Member-*Ex-officio*.

Dr. A. N. Khosla relinquished Leadership of the Team on December 12, 1960 and Shri M. Thirumala Rao, M.P. took his place.

Shri Lal Singh ceased to be Member of the Team with effect from July 28, 1960 and Dr. Arjan Singh, Retd. Director of Agriculture, Punjab, was appointed Member in his place.

After a preliminary discussion on May 28, 1960 at Bombay, proceedings of which appear in *Appendix VIII*, field studies in Maharashtra State were started after the rainy season. In the first tour the Team visited the south-western part of the State and saw minor irrigation works in operation in the districts of Satara, Sangli, Poona, Kolaba and Ahmednagar. Later, the Team visited a number of works in the coastal areas, and in the districts of East and West Khandesh, Nasik and Vidarbha region where the Ex-Malguzari tanks built 200 to 300 years ago exist in large numbers.

The study primarily aimed at getting a techno-economic appraisal of the works completed during Plan periods. During this period considerable emphasis had been laid on creating new irrigation resources in the State but there has not been that degree of mobilisation of effort for utilisation thereof. The Team has, therefore, stressed upon this aspect of development of irrigation, with a view to help optimisation of agricultural production both from old and new works.

While looking into the question of planning and prospecting of further works it appeared that the State needs must have a unified code governing Irrigation works, apart from a comprehensive survey of its potentialities.

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