

PREFACE

*In the National Water Policy document emphasis has been laid on the hydrological studies to be carried out taking the river basin as a unit. In view of this, during the 31st meeting of the Technical Advisory Committee (TAC) of NIH held on 21st March 1994 at Roorkee, it was decided that the Institute would carry out comprehensive hydrological studies for a typical basin with a view to cover all hydrological aspects. Keeping in view the data availability and extent of water resources development, the Narmada Basin was identified for these studies. The project was entitled: **Comprehensive Hydrological Studies for Narmada River Basin**. Under this project, attempt has been made to analyse the hydrological and hydrometeorological data for studying the various hydrological problems of the Narmada river basin. In this regard, Institute had planned field visits to the Narmada River basin and collected data to the extent possible. The Institute had also planned field experiments in some of the sub-basins of Narmada basin in order to collect soil samples and perform in-situ experiments at selected sites. The samples brought from the field were analysed in the laboratories of the Institute and important properties of the soil were determined. The data collected from field agencies were analysed and the results of these studies were prepared as Technical Reports of the Institute. Based on these studies, 51 technical reports and 30 research papers have been published.*

During the 37th meeting of Technical Advisory Committee (TAC) of NIH held on 26 Sept. 1997 at Roorkee it was decided that the Institute should bring out a compilation report based on the findings of the studies carried out by the Institute for the Narmada river basin. A draft report was put up before the TAC at its 38th meeting held on 17 March 1998 at New Delhi. After going through the report, the TAC desired that the detailed recommendations may be included in the report and the same may be widely circulated to various field/user agencies for the application of the findings and recommendations of the studies for solving various hydrological problems. In view of the above, this compilation has been revised to include summary, conclusions and specific recommendations emerged out of the studies carried out by the Institute in various areas for the Narmada river basin. The findings presented in this report are subject to limitations of data availability and data quality.

This report has been compiled by Sri Rakesh Kumar and Sri C.P. Kumar, scientists of the Institute under the guidance of Sri R D Singh, and Dr. K K S Bhatia and the word processing and page layout were carried out by Sri T P Panicker. I hope that the conclusions brought out in this report will be useful for the user agencies. It is expected that the studies conducted by the Institute for Narmada Basin would not only be useful for field engineers located in Narmada Basin but would also serve as a guideline for conducting similar studies for other basins. The Institute, as always, would be willing to guide and assist field engineers in carrying out similar studies.


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